$\qquad$

1. Eli's family eats $1 \frac{3}{8}$ pizzas. Which drawing has $1 \frac{3}{8}$ shaded?
A


(B)

D


2. Barb has 2 cats. Rita has 13 fish and 1 dog. Sam has 4 dogs and 2 birds. How many animals do Barb, Rita, and Sam have all together?
A 31
(B) 22

C 19
D 12
3. Mr. Martin works 9 hours each day for 5 days. What is the total number of hours he works?

## 45

4. Jules tosses a penny 3 times. List all the possible combinations of heads ( H ) and tails ( T ) that Jules might get.

## HHH, HHT, HTT,

 HTH, THT, TTH,
## THH, TTT

5. This drawing shows two streets that cross each other.


When Main Street crosses Oak Street, what kind of angle do they appear to form? Right angle

1. A cargo ship weighs one billion, three hundred forty-six million, thirty thousand, four hundred pounds. What is this weight written in standard form?
A 1,000,346,430
B 1,000,400,346
(C) $1,346,030,400$

D 1,346,340,000
2. The mean distance from the planet Neptune to the sun is 4,497,000,000 kilometers. In this distance, which number is in the ten millions place?
(A) 9

B 7
C 4
D 0
3. A scientist collects a sample with a mass of $6,097,221,003$ grams. What is the mass of the sample if the scientist
a. increases it by 1,000 grams?

## 6,097,222,003 grams

b. increases it by 100,000,000 grams?

## 6,197,221,003 grams

c. decreases it by 1,000,000 grams?
6,096,221,003 grams
4. Write the missing information in the table below.

| $16 \times 1=$ | 16 |
| :---: | :---: |
| $16 \times 10=$ | 160 |
| $16 \times 100=$ | 1,600 |
| $16 \times 1,000=$ | 16,000 |

$\qquad$

1. Acme Nails made $55,672,459,257$ nails last year. The Jones
Company made more nails than Acme did. Which could be the number of nails made by the Jones Company?
A 55,599,599,399
(B) $55,674,348,146$

C 55,573,560,458
D 55,672,360,368
2. The chart shows the distance to Star X from 4 other stars.

Distance of Stars to Star X

| Stars | Distance |
| :---: | :---: |
| $P$ | $6,239,000,093$ miles |
| $Q$ | $6,340,999,122$ miles |
| $R$ | $6,239,100,291$ miles |
| $S$ | $6,308,512,300$ miles |

Which lists the stars in order from least to greatest distance to Star X ?
(A) $P, R, S, Q$

B P, Q, R, S
C S,R,Q, P
D S, P, Q, R
3. Write a number that is less than 4,001,020,000.
Any number less than or equal to 4,001,019,999
4. Write a number that is greater than 10,910,099,999, but is less than 11,000,000,000.

## Any number

greater than
or equal to
10,910,100,000 and less than
or equal to
10,999,999,999
5. Look at the shape below.


How many vertices does this shape have?

1. What is the value of the underlined digit?
1.207653
(A) 0.0006

B 0.006
C 2.0006
D 2.006
2. Caroline has five and six hundred twenty thousandths yards of batting to put into a quilt. What is that number in standard form?
A 5,620
B 5,600.20
(C) 5.620

D 0.5620
3. 27,563 is greater than $\qquad$ ?
(A) 27,536

B 27,563
C 27,567
D 27,653
4. Nico's new skateboard is 7.75 inches wide. Write 7.75 in word form.

## Seven and

 seventy-five hundredthsName two decimals that are equivalent to 7.75 .

## Sample answers: 7.750 and 7.7500

5. Kari weighs thirty-eight and nine thousand seven hundred seventytwo ten-thousandths kilograms. What is her weight in standard form?

### 38.9772 kilograms

What is the value of the digit 9 in the number that shows Kari's weight?

## Nine tenths

Kari's weight is 85.75 in pounds.
Write 85.75 in word form.

> Eighty-five and
> seventy-five
> hundredths

1. The chart shows about how much one U.S. dollar was worth in euros, the currency used in Europe.
Worth of U.S. Dollar in Euros

| Date | Estimated Worth <br> of $\$ 1$ in Euros |
| :---: | :---: |
| January 17 | 0.828 |
| February 17 | 0.834 |
| March 17 | 0.820 |
| April 17 | 0.815 |

On which date was a U.S. dollar worth the most amount in euros?
A January 17
(B) February 17

C March 17
D April 17
2. The speeds in pages per minute (ppm) for four printers are: $7.105 \mathrm{ppm}, 7.221 \mathrm{ppm}, 7.4 \mathrm{ppm}$, and 7.08 ppm . Which lists the speeds in order from greatest to least number of pages per minute?
A 7.08, 7.105, 7.221, 7.4
(B) $7.4,7.221,7.105,7.08$

C $7.221,7.105,7.08,7.4$
D 7.4, 7.08, 7.105, 7.221
3. Fill in the blanks with the digits 3,4 , and 5 to write the greatest possible decimal. Use each digit once.

$$
0.543
$$

4. Look at the number line below.


What value does point $X$ show? $1 \frac{1}{4}$
5. Fill in the blanks with the digits 0 , 1,2 , and 3 to make each number sentence true. Use each digit once in each number sentence.
a. $\qquad$ . $\qquad$ $>2.099$
a. $2.103,2.130,2.2 .301$, 2.310, 3.012, 3.021, 3.102, 3.120, 3.201, or 3.210
b. $0.123,0.132,0.213$, $0.231,0.312,0.321$, 1.023, 1.032, 1.203, 1.230, 1.302, 1.320, 2.013, or 2.031

1. The table shows the price of a hot dog at the school fair for the past 4 years.

## Price of Hot Dogs

| Year | 2001 | 2002 | 2003 | 2004 |
| :---: | :---: | :---: | :---: | :---: |
| Price | $\$ 0.90$ | $\$ 0.91$ | $\$ 0.92$ |  |

Which was most likely the price of a hot dog at the school fair in 2004?

A $\$ 0.92$
(B) $\$ 0.93$

C $\$ 0.95$
D \$0.99
2. The table shows the thickness of four kinds of paper.

| Paper Thicknesses |  |
| :---: | :---: |
| Kind of Paper | Thickness <br> (in millimeters) |
| Book | 0.147 |
| Cover | 0.152 |
| Index | 0.216 |
| Rag | 0.081 |

Which lists the kinds of paper in order from thinnest to thickest?

A Book, Cover, Index, Rag
B Book, Cover, Rag, Index
C Rag, Cover, Index, Book
(D) Rag, Book, Cover, Index
3. Fill the boxes in the decimal grid below. Use the pattern add 0.001 .

| 0.345 | $\mathbf{0 . 3 4 6}$ | $\mathbf{0 . 3 4 7}$ | $\mathbf{0 . 3 4 8}$ |
| :--- | :--- | :--- | :--- |

4. The graph shows the number of students in the lunchroom wearing different kinds of shoes.


Which kind of shoes are the most popular?
Sneakers

1. The chart shows the growth of a plant each month.

| Monthly Plant Growth |  |
| :---: | :---: |
| Month | Growth <br> (in millimeters) |
| May | 3 |
| June | 16 |
| July | 27 |

What is the total growth of the plant from May through July?
(A) 46 millimeters

B 30 millimeters
C 27 millimeters
D 24 millimeters
2. Jenny read 47 pages last week.

This week she read 102 pages. How many more pages did Jenny read this week than last week?
A 53
(B) 55

C 102
D 149
3. Rico buys a rectangular rug to put on his living room floor. The rug is 8 feet long and 6 feet wide. What is the area of the floor that the rug will cover?

## 48 square feet

4. Kim has $\$ 260$ in her checking account. She puts in $\$ 39$. Then she writes a check for $\$ 58$. How much is left in Kim's account? \$241
5. What is the value of the underlined digit?

$$
\begin{aligned}
& \text { 8,531,980,112 } \\
& \hline
\end{aligned}
$$

$\qquad$

1. Ms. Alvarez's class collects 54 pounds of food during their holiday food drive. Which number sentence could you use to find how many 6-pound bags of food the students can give away?
A $54+6=\square$
B $54-6=\square$
C $54 \times 6=\square$
(D) $54 \div 6=\square$
2. The driving time between Houston and Los Angeles is about 22.88 hours. What is this number rounded to the nearest tenth?
A 20
B 22.88
(C) 22.9

D 23.0
3. Last year, the Able Company made less money than the Baker Company. Baker made $\$ 35,021,242,010$. Which could be the amount of money Able made?
A \$35,102,831,009
(B) $\$ 35,019,300,020$

C \$35,030,000,105
D $\$ 35,130,241,000$
4. As of June 19, 2006, the population of the earth was estimated at $6,523,183,959$. What is this number rounded to the nearest hundred million?

## 6,500,000,000

5. What is the number below rounded to the place of the underlined digit?
582.091

### 582.000

6. Write $4,508,020,993$ in word form.

## Four billion, five

 hundred eight million, twenty thousand, nine hundred ninetythree1. A carpenter cuts 3.7 feet from a board that is 10.9 feet long. Which is the best estimate of the length of the remaining board?
A 4 feet
(B) 7 feet

C 11 feet
D 15 feet
2. The list below shows the things Mark buys at a clothing store.


Which is the best estimate of the total Mark spends, not including tax?

A $\$ 57$
(B) $\$ 48$

C $\$ 40$
D \$36
3. James saves $\$ 23$ each month. How much money has he saved after 7 months?
\$161
4. A soccer stadium has 40,218 seats. For one game, 37,842 people come to the stadium. Estimate the number of empty seats at the game to the nearest thousand.

## approximately

## 2,000 empty seats

5. Estimate the sum to the nearest whole number.

## $29.1+78.9+41.5$

## approximately 150

6. Ryan takes 2 pairs of shoes (sneakers and sandals) and 3 pairs of shorts (red, blue, and white) when he goes on a trip. List all the possible outfits with 1 pair of shoes and 1 pair of shorts that Ryan could wear.
sneakers and red shorts; sneakers and blue shorts; sneakers and white shorts; sandals and red shorts; sandals and blue shorts; sandals and white shorts
7. Maria practices her drums on all but 6 of the 31 days in January. Let $d$ be the number of days Maria practices in January. Which equation could you use to find $d$ ?
A $d-31=6$
B $d+31=6$
C $d-6=31$
(D) $d+6=31$
8. The table shows the population of the four largest cities in Texas.

Largest Cities in Texas

| City | Population <br> (as of April 2000) |
| :---: | :---: |
| Austin | 656,562 |
| Dallas | $1,188,580$ |
| Houston | $1,953,631$ |
| San Antonio | $1,144,646$ |

What is the population of San Antonio, rounded to the nearest million?
(A) $1,000,000$

B 1,100,600
C 1,145,000
D 1,200,000
3. Which of the four cities has the second-greatest population?
A Austin
(B) Dallas

C Houston
D San Antonio
4. Fill in the boxes to make the number sentences true.

$$
\begin{aligned}
7 \times \mathbf{9} & =63 \\
63 \div \mathbf{7} & =9
\end{aligned}
$$

5. A restaurant serves 42 chicken dinners and 18 steak dinners. Let $m$ be the difference between the numbers of chicken and steak dinners.
a. Draw a picture you could use to find $m$.

## 42 chicken


b. What is the value of $m$ ?

24
6. Mark an $X$ on any of these shapes that appear to have a pair of parallel lines.


1. The table shows the greatest distance between the sun and several planets.

Distances from the Sun

| Planet | Greatest <br> Distance from <br> the Sun (miles) |
| :---: | :---: |
| Mercury | $43,400,000$ |
| Jupiter | $507,100,000$ |
| Neptune | $2,819,080,000$ |

How much farther from the sun is Neptune at its greatest distance than Mercury at its greatest distance?

A $463,700,000$ miles
(B) $2,775,680,000$ miles

C $2,862,480,000$ miles
D 2,862,840,000 miles
2. The population of a city is 101,934 . The city's suburbs have a population of 29,382 . What is the total population of the city and its suburbs?
A 120,216
(B) 131,316

C 395,754
D 405,864
3. Yosemite National Park covers 750,000 acres. Mammoth Cave National Park covers 52,830 acres. How many more acres does Yosemite cover than Mammoth Cave?

## 697,170 acres

4. Write a division number sentence using 3, 9, and 27.

$$
\begin{gathered}
27 \div 3=9 \\
\text { or } 27 \div 9=3
\end{gathered}
$$

5. Fill in the blank to make the number sentence true.

$$
\begin{array}{r}
420,008-9,569= \\
\mathbf{4 1 0 , 4 3 9}
\end{array}
$$

6. A bank offers savings accounts with these interest rates: 0.809, 0.098 , and 0.890 . Which rate is the greatest?

### 0.890

1. Laura keeps track of the amount of gasoline she buys each week.

Laura's Gasoline Purchases

| Week | Amount of Gas <br> Bought (gallons) |
| :---: | :---: |
| 1 | 12.4 |
| 2 | 10.99 |
| 3 | 11.07 |
| 4 | 9.61 |

How many total gallons of gasoline did Laura buy during Week 1 and Week 2?

A 12.23
B 22.39
(C) 23.39

D 33.40
2. Ms. Reyes goes to the garden center. She buys a tree for $\$ 40.49$ and some soil for \$19.90. What is the total amount Ms. Reyes spends?
A $\$ 42.48$
B $\$ 59.40$
C $\$ 59.59$
(D) $\$ 60.39$
3. In a gymnastics meet, the team score is the total of each team member's score.

| Team A | Score | Team B | Score |
| :---: | :---: | :---: | :---: |
| Gina | 9.052 | Lou | 9.245 |
| Mari | 8.935 | Jen | 9.611 |
| Kim | 8.701 | Pat | 8.003 |
| Ana | 9.008 | Kira | 8.525 |

Which team wins the meet? What is the score of the winning team?
Team A; 35.696
4. Can you draw a triangle with two obtuse angles?
No; the sum of two obtuse angles would be more than $180^{\circ}$.
5. Mr. Blaine pays Ron, Nan, and Lin $\$ 45$ to mow and clean up his yard. If Ron, Nan, and Lin share the money equally, how much does each person get?
\$15

1. At a ski-jump competition, the first-place jumper has 231.2 points. The last-place jumper has 198.4 points. What is the difference between the scores for first and last place?
(A) 32.8 points

B 33.2 points
C 41.8 points
D 48.8 points
2. The regular price for a bicycle is $\$ 210.19$. The sale price is $\$ 43.48$ less than the regular price. What is the sale price?
A $\$ 177.71$
B $\$ 175.39$
(C) $\$ 166.71$

D $\$ 146.41$
3. Which is the best estimate of the weight of a car?
A 2,000 gallons
B 2,000 grams
C 2,000 ounces
(D) 2,000 pounds
4. Subtract.
$10.06-6.101$ 3.959
5. Jana's best time in a swim race so far is 3.058 minutes. What is the slowest she could swim the race and still beat her best time by 0.02 minutes?

### 3.038 minutes

6. The table shows the mass of 4 samples.

|  | Mass (grams) |
| :---: | :---: |
| Sample A | 0.130 |
| Sample B | 0.301 |
| Sample C | 0.031 |
| Sample D | 0.013 |

List the samples in order from least to greatest mass.

D, C, A, B

1. Jennie has 2 cats, both of which just had kittens. Zippy has twice as many kittens as Fuzzy. Jennie's friends adopt 5 of the kittens. What do you need to know to find out how many of the kittens Jennie keeps?
(A) The total number of kittens

B How old the kittens are now
C How many friends Jennie has
D The date when the kittens were born
2. Pedro's weekly salary is $\$ 372.29$. He has $\$ 45.50$ taken out of his salary to pay for insurance and savings. How much is left for Pedro's paycheck?
A $\$ 226.69$
(B) $\$ 326.79$

C $\$ 333.39$
D \$367.74
3. An animal rescue center has 51 reptiles, 34 birds, and 16 mammals. Which is the best estimate of the total number of animals?

A 120
(B) 100

C 70
D 50
4. A marathon is a running race that is about 26.219 miles long. What is the value of the 9 in this distance?

## Nine thousandths

5. Draw the shaded shape below, rotated $90^{\circ}$ clockwise.

6. Write five and four hundred three thousandths in standard form.
5.403
7. Roberto and Adam have the same number of pennies. Roberto put his pennies in 2 stacks of 6 pennies each. Adam puts his pennies in 6 stacks. How many pennies are in each of Adam's stacks?
(A) 2

B 4
C 8
D 12
2. The table shows the scores for four divers in a diving meet.

Diving Meet Scores

| Diver | Score |
| :---: | :---: |
| Jamal | 25.050 |
| Kelly | 20.505 |
| Luis | 25.005 |
| Marco | 20.055 |

Which diver is in third place?
A Jamal
(B) Kelly

C Luis
D Marco
3. Kim's farm is 1,292 acres. Jack's farm is 1,104 acres. Which is the best estimate of the difference in size between Kim's farm and Jack's farm?

A 400 acres
(B) 200 acres

C 100 acres
D 90 acres
4. Fill in each box to make an example of the given property.

| Identity <br> Property of <br> Addition | Identity <br> Property of <br> Multiplication |
| :---: | :---: |
| $25+\mathbf{0}=25$ | $25 \times \boxed{1}=25$ |

5. A football stadium has 81,296 seats. Then the stadium's owner adds 10,795 seats. What is the new total number of seats?

92,091
6. A copy machine can make 36 copies in 1 minute. How many copies can the machine make in 10 minutes?

360
$\qquad$

1. Mr. Johnson works 80 hours each pay period. His salary is $\$ 20$ per hour. How much money does he earn in 10 pay periods?
A \$160,000
(B) $\$ 16,000$

C $\$ 1,600$
D \$160
2. Marti, Joel, Oscar, Lucas, and Quentin each ate 2,000 calories per day for 6 days. What is the total number of calories they ate?
A 10,000
B 12,000
C 30,000
(D) 60,000
3. Emily buys a CD for $\$ 12.07$, including tax. She gives the clerk a $\$ 20$ bill. How much change should she receive?

A $\$ 8.93$
B $\$ 8.07$
C $\$ 7.93$
D $\$ 7.07$
4. Each day, a car goes through the intersection of Main Street and Oak Road 300 times. How many times does a car go through this intersection in 300 days?

## 90,000

5. Write a number sentence to show the Associative Property of Addition.

## A number

 sentence in theform $a+(b+c)$
$=(a+b)+c$
6. Draw a reflection of the shape below.

$\square$


1. Ms. Sakura teaches her 27 students to make folded-paper birds. Each student can make about 2 birds in 1 minute. About how many birds can all the students make in 55 minutes?
(A) 3,000

B 1,500
C 100
D 60
2. Yesterday, the snow at the peak of Bleak Mountain was 450.23 inches deep. Last night, a snowstorm added another 14.095 inches of snow. Now, how deep is the snow at the peak of Bleak Mountain?
A 436.135 inches
(B) 464.325 inches

C 465.18 inches
D 591.18 inches
3. This spinner is divided into equal sections. What are the chances that the spinner will land on a number?


A 2 out of 4
(B) 2 out of 6

C 4 out of 2
D 4 out of 6
4. Four athletes are keeping track of how much they walk each day during the summer. The table shows how many kilometers each athlete walked on Saturday.

| Athlete | Distance Walked <br> $\mathbf{( k m )}$ |
| :---: | :---: |
| Anne | 16.3 |
| Keisha | 16.48 |
| Michael | 16.5 |
| Terrell | 15.69 |

Who walked the farthest?
Michael
5. The Texas state tree is the pecan. Pecan trees grow about 19 inches per year. Fill in the blanks below to estimate how many inches of growth a group of 882 pecan trees would gain in 5 years. Is your answer an overestimate or an underestimate?

## 20 $\times 900 \times 5=\underline{90,000}$

## Overestimate

6. A company earned $\$ 4,311,608,242$ last year. This year, the company earned $\$ 5,097,745,368$. How much more money did the company earn this year?
$\qquad$

## 3-5

1. A delivery truck travels 346 miles each day for 5 days. What is the total number of miles the truck travels?
A 1,500 miles
B 1,523 miles
C 1,700 miles
(D) 1,730 miles
2. A group of 106 campers sits in a big circle. The camp leader tells the campers to say "hello" to the person sitting next to them on each side. What is the total number of times the campers say "hello"?
A 226
B 212
C 206
D 202
3. If each shaded square is $\frac{1}{10}$, what number does the model show?


A 0.13
(B) 1.3

C 3.7
D 13.7
4. One cubic foot of concrete weighs about 145 pounds. What is the weight of 9 cubic feet of concrete?

1,305 pounds
5. The graph shows the number of states the students in Mr. Robb's class have visited.


How many students have visited at least 4 states?

10 students
6. Write this number in word form: 40.302

Forty and three hundred two
thousandths

1. A parking lot has 68 rows with 24 parking spaces in each row. What is the total number of parking spaces?
(A) 1,632

B 1,502
C 408
D 272
2. Sharla and Tim each build a brick wall using the same-size bricks.
Sharla's wall is 28 rows with 14 bricks each. Tim's wall is 14 rows with 28 bricks each. Which statement about Sharla's wall is correct?
A It has more bricks than Tim's wall.
B It has fewer bricks than Tim's wall.
(C) It has the same number of bricks as Tim's wall.
D It has twice as many bricks as Tim's wall.
3. The ABC Company has 67,590 workers. The Smith Company has 5,348,299 workers. How many workers do the two companies have in all?
A $5,305,789$
(B) $5,415,889$

C 11,097,299
D 12,107,299
4. The sports field at Patton Elementary School is shaped like a rectangle. The field is 72 yards long and 46 yards wide. What is the area of the field in square yards?

## 3,312 square yards

5. Gina is making a square tablecloth.


What is the least number of inches of trim Gina will need to go all the way around the edge of the tablecloth?

$$
216 \text { inches }
$$

6. Round to the place of the underlined digit: 8,491,038,205.

$$
8,491,040,000
$$

1. Dr. Perez has been a doctor for 24 years. He sees each patient for 1 hour. Dr. Perez worked 30 days last month and saw 7 patients each day.

Which piece of information is
NOT needed to find the total time
Dr. Perez spent with patients last month?
A The total time he spends with each patient
B The total number of patients he saw each day
(C) The total time he has been working as a doctor
D The total number of days he worked last month
2. A drawer full of socks contains 3 red pairs, 2 yellow pairs, 5 black pairs, and 1 white pair. What are the chances, if you choose a pair of socks without looking, that it will be a red pair?
A 1 out of 3
B 1 out of 8
C 3 out of 8
(D) 3 out of 11
3. A worker paints a 5.2 -foot wide crosswalk on a street. Her boss tells her to make the crosswalk 1.25 feet wider. How wide is the finished crosswalk?
A 1.25 feet
B 1.77 feet
C 6.27 feet
(D) 6.45 feet
4. Gina takes a group of her friends out for lunch. She buys a bottle of water, a sandwich, and a salad for herself and each friend. The water costs $\$ 1.19$ for each bottle. One sandwich costs $\$ 2.35$. Each salad is $\$ 1.99$.

Can you find the total amount of money Gina spends?

## No; you need to

know how many friends Gina buys
lunch for.
5. The state of Texas has 261,197 square miles of land and 6,784 square miles of water. How many more square miles of land does Texas have than water?

## 254,413 square miles

6. What is the perimeter of this rectangle?


## 248 centimeters

1. Which answer is equal to $3^{4}$ ?

A $6^{2}$
B $4^{3}$
C $8^{2}$
(D) $9^{2}$
2. If $2,347,895$ is rounded to the nearest hundred thousand, which of the following numbers will it be?
A $2,350,000$
B $2,348,000$
(C) $2,300,000$

D 2,000,000
3. Delfina is moving to a new house, and she is packing some books in a box that measures 12 inches tall by 12 inches wide by 12 inches deep. Write the measurements of the box in exponential notation, in standard form, and in expanded form.

## Expanded - $12 \times$

$12 \times 12$
Exponential - $12^{3}$
Standard - 1,728
4. Write the following numbers in exponential notation and standard form.
$5 \times 5 \times 5 \times 5 \times 5 \times 5$
$8 \times 8 \times 8 \times 8$
$5^{6}$ and 15,625;
$8^{4}$ and 4,096

1. Steve uses 6 balls of yarn to knit a sweater. Knitting a blanket takes 15 times as many balls of yarn. Which equation can Steve use to find $b$, the number of balls of yarn he needs to knit a blanket?
A $6+15=b$
(B) $6 \times 15=b$

C $6+b=15$
D $6 \times b=15$
2. Meg buys 12 bags of sunflower seeds. Each bag has 58 seeds.
How many seeds does Meg buy?
(A) 696

B 686
C 174
D 116
3. After waking up, it takes Cheyenne 35 minutes to get ready to leave for school. She takes 20 minutes to walk to school. If Cheyenne wakes up at 7:15 A.м., at what time does she arrive at school?
A 7:40 A.m.
B 7:55 А.м.
C 8:00 A.M.
(D) $8: 10$ A.M.
4. A building has 8 same-sized apartments. The area of 1 apartment is 725 square feet. Let $t$ be the total area of the 8 apartments.
a. Draw a picture to describe $t$.
$t=$ total area

b. Write an equation that you could use to find $t$.
$725 \times 8=t$
c. What is the value of $t$ ?

## 5,800 square feet

5. For the 2004-05 school year, the state of Texas spent about thirtyeight billion dollars on education. Write this amount of money in standard form.

## $\$ 38,000,000,000$

6. Last year, Handy Hardware Store sold 45,078 bolts and $5,011,542$ nails. How many more nails did the store sell than bolts?

$$
4,966,464
$$

1. A school's Parent-Teacher Club raises $\$ 280$ by washing cars. Each car wash costs $\$ 4$. How many cars did the club wash?
A 7
(B) 70

C 700
D 7,000
2. In basketball, if a player makes a basket from behind a certain line, the basket is worth 3 points. Last year, a team made 392 of its 3 -point baskets. How many points did the team earn last year from 3-point baskets?
(A) 1,176

B 1,086
C 976
D 395
3. Mr. Lopez buys shoes for his two children, Maria and Juan. Maria's shoes cost $\$ 28.35$ with tax. Juan's shoes cost $\$ 30.97$ with tax. How much did Mr. Lopez pay for Maria's and Juan's shoes?
A $\$ 57.05$
B $\$ 58.22$
C) $\$ 59.32$

D $\$ 68.05$
4. A flour mill produces the same amount of flour every hour. At the end of 8 hours, the mill has produced 48,000 pounds of flour. How many pounds of flour does the mill produce in 1 hour?

## 6,000 pounds

5. In the year 2000, San Antonio, Texas, had a population of $1,144,646$. What is this population rounded to the nearest hundred thousand?

## 1,100,000

6. This thermometer shows the normal temperature of a healthy adult human.


Human
The temperature of a fish could be $19^{\circ} \mathrm{C}$ lower. Mark the fish's temperature on the thermometer below.


Fish

1. Last summer, 137 kids signed up for swim lessons at City Pool. Each of the 7 swim teachers had about the same number of kids. About how many kids did each teacher have?
A About 13
B About 14
(C) About 20

D About 30
2. A scientist studies a sample that weighs 1 ounce, which is about 28 grams. About how many grams would be in a 48 ounce sample?
A About 80 grams
B About 600 grams
(C) About 1,500 grams

D About 2,800 grams
3. The state of Texas is 268,601 square miles in area. Rhode Island is 1,545 square miles. How much larger is Texas than Rhode Island?
A 267,144 square miles
(B) 267,056 square miles

C 156,055 square miles
D 114,101 square miles
4. A crew of house painters uses 814 gallons of paint to paint 9 buildings. They used about the same amount of paint for each. About how many gallons of paint did they use on each building?

## about 90 gallons

5. Logan puts a wallpaper border along the top edge of the 4 walls of a rectangular room. The room is 10 feet long and 12 feet wide. If there are no breaks in the border, how long is it?
44 feet
6. There are 40,000 people at a football game. The seats are set up in 8 equal sections. How many people can sit in each section? 5,000
7. A baker makes 75 muffins. How many boxes of 4 muffins can the baker completely fill?
(A) 18

B 19
C 21
D 22
2. Maria, Cho, and Kelly live in an apartment. They spend $\$ 180$ for a new couch. If they split the cost equally, how much does each girl owe?
A $\$ 90$
B $\$ 80$
(C) $\$ 60$

D \$30
3. Ricky buys a big box of crayons. Inside the big box are 4 small boxes. Each small box holds the same number of crayons. Which do you need to know to find the total number of crayons Ricky buys?
A The width of a crayon
B The length of a crayon
C The cost of a small box of crayons
(D) How many crayons are in a small box
4. The Texas coast is 367 miles long. One day, 30 school groups pick up trash along the coast. Each group cleans up a different part of the coastline. Each group's part is the same length, a whole number of miles.
a. What is the greatest number of whole miles of coast that any one group could clean up? 12 miles
b. What is the length of the coast that NONE of the groups cleaned?
7 miles
5. A carpenter buys 144 boxes of nails. Each box has 36 nails. How many nails does the carpenter buy?

$$
5,184
$$

6. Fill in the boxes to make the number sentences true.

$$
\begin{aligned}
6 \times 8 & =48 \\
48 \div 6 & =8
\end{aligned}
$$

1. The 4 businesses in a shopping center each pay an equal share of the center's electric bill. This month, they used 852 kilowatthours of electricity. How many kilowatt-hours must each business pay for?
A 210 kilowatt-hours
B 213 kilowatt-hours
C 240 kilowatt-hours
D 243 kilowatt-hours
2. Dakota has 416 baseball cards in 7 boxes. Each box has about the same number of cards. About how many cards are in each box?
A 80
(B) 60

C 50
D 40
3. D'Andre is 13 years old. How many days old is D'Andre? (Include 3 leap days.)
A 1,350
B 4,635
C 4,648
(D) 4,748
4. There are 6 salespeople at Good Folks Used Car Lot. Last year, they each sold the same number of cars. Together, they sold 534 cars. How many cars did each salesperson sell?

89
5. The table shows the area of the four oceans.

| Ocean | Area (square <br> kilometers) |
| :---: | :---: |
| Arctic | $14,056,000$ |
| Atlantic | $76,762,000$ |
| Indian | $68,556,000$ |
| Pacific | $155,557,000$ |

List the oceans in order from greatest area to least area.

## Pacific, Atlantic, Indian, Arctic

1. Ms. Sanchez buys boxes to pack up 169 books. Each box holds 9 books. How many boxes should Ms. Sanchez buy?
A 25
(B) 19

C 18
D 11
2. The members of a softball team put their names in a hat. Then the coach picks one name to see who will bring snacks to the next game.

| Mari | Paula | Zoë |
| :---: | :---: | :---: | :---: |
| Mike | David | Meg |
| Juan | Mina | Pablo |

What are the chances that the person who brings snacks to the next game has a name that starts with the letter $M$ ?

A 1 out of 9
B 2 out of 3
C) 4 out of 9

D 5 out of 4
3. The tallest mountain measured from the bottom of the ocean is Mauna Kea, in Hawaii. Mauna Kea is 33,474 feet tall, but only 13,796 feet of its height is above sea level. How many feet of Mauna Kea are below sea level?
(A) 19,678 feet

B 20,322 feet
C 46,160 feet
D 47,270 feet
4. A flower shop sells vases of mixed flowers. Each vase includes 3 roses. If the shop uses 882 roses, how many vases of mixed flowers do they sell?

## 294

5. The average distance from the Sun to the planet Neptune is $2,795,080,000$ miles. Write this distance in word form.

Two billion

## seven hundred

ninety-five million eighty thousand
6. Julia rents an apartment that costs $\$ 845$ each month. How much rent will she owe for a year?

$$
\$ 10,140
$$

1. A company puts up a billboard every 4 miles along 432 miles of highway. How many billboards does the company put up?
A 10
B 18
(C) 108

D 180
2. During a sale, a grocery store gives every third customer a free loaf of bread. If the store gets 910 customers, how many loaves of bread does the store give away for free?
A 340
B 330
C 304
(D) 303
3. Which button has a letter with a pair of parallel lines?
A K
B (G)
C $R$
(D) $H$
4. A pet store can put no more than 5 fish in each tank. What is the least number of tanks the store needs to hold 354 fish?

5. Write six billion, sixty-seven million, four hundred four thousand, thirteen in standard form.

## 6,067,404,013

6. The Turner family saves $\$ 42$ each month. How much have the Turners saved after 15 months?
\$630
7. Dan sets up 24 tables in equal rows for a big party. Each row must have at least 5 tables. Which list shows all the different ways that Dan can set up the tables in equal rows?
A $1 \times 2,2 \times 3,3 \times 4,4 \times 6$
B $1 \times 2,3 \times 4,6 \times 8,12 \times 24$
(C) $1 \times 24,2 \times 12,3 \times 8,4 \times 6$

D $1 \times 24,2 \times 12,3 \times 8,4 \times 6$, $5 \times 5$
2. Which best explains how to change $3 \frac{5}{9}$ into an improper fraction?
A Add 9 and 3 . Then multiply the sum by 5 . Then write the product over the old denominator, 9.
B Add 3 and 5. Then multiply the sum by 9 . Then write the product over the old denominator, 9.
C Multiply 3 by 5 . Then add 9 to the product. Then write the sum over the old denominator, 9.
(D) Multiply 9 by 3 . Then add 5 to the product. Then write the sum over the old denominator, 9.
3. A rancher has 112 sheep. He puts a group of 28 sheep in each of his fields. How many fields does the farmer have?
(A) 4

B 7
C 37
D 48
4. List all the factors of 96 .

$$
\begin{aligned}
& \frac{1,2,3,4,6,8,12,}{16, ~ 24,32, ~ 48, ~} 96 \\
& \hline
\end{aligned}
$$

5. A sign shop charges $\$ 4$ per letter to print a message on a banner. How much does the shop charge for a banner with the message "Big Sale Today"?

## $\$ 48$

6. Plot and label a point on this number line to show 0.7.

7. In a game, each player draws a number. If the number is prime, the player gets 5 points. The table shows four players and the numbers they draw.

## Game Results

| Player | Number |
| :--- | :---: |
| Angel | 38 |
| Cory | 31 |
| Maria | 30 |
| Rachel | 35 |

Which player gets 5 points?
A Angel
(B) Cory

C Maria
D Rachel
2. A baker makes 84 loaves of bread, but she burns 4 of them. What fraction of the loaves does the baker burn?
A $\frac{1}{88}$
B $\frac{1}{80}$
(C) $\frac{1}{21}$

D $\frac{1}{20}$
3. Use a factor tree to find the prime factorization of 164.


## The prime factorization of

 164 is $2 \times 2 \times 41$.4. Kevin buys a car. His car payment is $\$ 248$ per month. After 55 payments, how much has Kevin paid?

## \$13,640

5. The clock shows the time when Kelly left for school.

## 7:48 8.п.

Kelly takes 15 minutes to walk to school. What time is it when she gets to school?

## 8:03 A.м.

$\qquad$

1. When all the seats are filled, a Ferris wheel can take 72 people for a ride. There are 313 people waiting to ride the wheel. Which drawing represents the number of rides with all the seats filled?
A

(B)

C

D

2. Last year, a bead store sold 104,002 glass beads and 47,357 wooden beads. How many more glass beads than wooden beads did the store sell?
A 54,755
(B) 56,645

C 67,645
D 67,755
3. A farmer has to pack 836 oranges into boxes. Each box holds 44 oranges. Let $b$ be the total number of boxes the farmer needs.
a. Draw a picture you can use to find $b$.

b. Write an equation to find $b$.

$$
836 \div 44=b
$$

c. How many boxes will the farmer need?

19 boxes
4. The table shows the thickness of different brands of plastic bags.

| Brand | Thickness <br> (centimeters) |
| :---: | :---: |
| Iron Sides | 0.023 |
| Mighty Hold | 0.003 |
| Steely Bags | 0.032 |
| Super XX | 0.004 |

List the brands of bags in order from thinnest to thickest.
Mighty Hold, Super XX, Iron Sides, Steely Bags
$\qquad$

1. Carson School has 1,200 students. The principal organizes them into 40 teams for Field Day. If each team is the same size, how many people are on a team?
(A) 30

B 40
C 116
D 120
2. Look at the figure below made up of 1 -unit cubes.


What is the volume of the figure?
A 20 units
B 40 units
(C) 80 units

D 400 units
3. A service group earns $\$ 1,800$ by recycling scrap metal. Each pound of scrap metal is worth $\$ 30$. How many pounds of scrap metal did the group recycle?
A 150
(B) 60

C 15
D 6
4. Fill in the blanks to complete the table.

| $400 \div 50$ | $=$ | 8 |
| :---: | :---: | :---: |
| $4,000 \div 50$ | $=$ | 80 |
| $40,000 \div 50$ | $=$ | 800 |
| $400,000 \div 50$ | $=$ | 8,000 |

5. Multiply.

$$
416
$$

$$
\times 34
$$

14,144
6. Emma buys a book and gives the clerk $\$ 13.00$. How much did the book cost if her change is $\$ 0.33$ ?
\$12.67

1. An apartment complex has 91 apartments. There are 177 cars in the complex parking lot. Which is the best estimate of the average number of cars per apartment?
A About 1
(B) About 2

C About 10
D About 20
2. A town is 28 square miles in area. The town's population is 2,603 . Which is the best estimate of the average number of people per square mile?
A About 9
B About 13
(C) About 90

D About 130
3. Frank earns $\$ 7$ per hour. How much does Frank earn for working 19 hours?
(A) $\$ 133$

B \$106
C $\$ 73$
D $\$ 26$
4. A copy shop prints 5,493 pages. They use the pages to make 68 same-size booklets. About how many pages are in each booklet? $5,600 \div 70=$

## about 80 pages

5. Twenty-three students make paper flowers to decorate their classroom. Each student makes 12 flowers. How many flowers did the students make altogether?

276 flowers
6. A youth group has 6 fifth-grade students, 7 sixth-grade students, and 4 eighth-grade students. One member of the group wins an award. Fill in the blanks below to describe the chances that the winner is a sixth-grader.

$$
7 \text { out of } 17
$$

1. Dora, Brent, Cara, and Andre go out for dinner. The bill is $\$ 32$, plus $\$ 5.60$ tax, and a $\$ 6.40$ tip. Each person pays an equal share of the total cost. What is each person's share?
A $\$ 12$
(B) $\$ 11$

C \$8
D \$3
2. Mr. Lopez drives his car 12,000 miles each year for 5 years. What is the total number of miles Mr. Lopez drives?
A 6,000
(B) 60,000

C 600,000
D 6,000,000
3. A row in a parking lot is 214 yards wide. Each parking space is 2 yards wide. How many parking spaces will fit in one row?
A 170
B 120
(C) 107

D 102
4. A school principal orders 75 boxes of chalk. Each box has 12 sticks of chalk. The school has 23 teachers.
Does the principal have enough chalk to give each teacher 40 sticks? If yes, how many sticks are left over? If no, how many more sticks does the principal need?

## No. ( $75 \times 12=900$, $900 \div 23=39$ R 3 );

## The principal

 needs 20 more sticks.
## ( $3+20=23$ ).

5. A wire is 16.5 centimeters long. Lisa cuts 1.025 centimeters off one end of the wire. How long is the remaining wire?

$$
15.475 \mathrm{~cm}
$$

6. In 2005, the Houston Livestock Show and Rodeo had 1,740,095 visitors. What is the value of the digit 7 in this number of people?

## Seven hundred

1. A computer can load 753 megabytes in 20 seconds. Which best describes the loading speed of the computer?
A Around 30 megabytes per second
(B) Close to 38 megabytes per second
C Nearly 40 megabytes per second
D More than 41 megabytes per second
2. The table shows the number of square feet painted by three house painters.

| Painter | Square Feet <br> Painted | Days <br> Worked |
| :---: | :---: | :---: |
| Martin | 719 | 2 |
| Juan | 825 | 3 |
| Christy | 836 | 3 |

Which best describes Christy's average painting speed?

A Almost 260 square feet per day
B Almost 270 square feet per day
C Almost 280 square feet per day
D Almost 290 square feet per day
3. A model of 1 -foot cubes is shown below.


What is the volume of this model?
A 90 cubic feet
(B) 60 cubic feet

C 30 cubic feet
D 15 cubic feet
4. List the painters in Question 2 in order from slowest to fastest average painting speed.

## Juan, Christy,

 Martin5. A business earns $\$ 45,692$ in January and \$70,359 in February. How much money did the business earn during these two months?

## \$116,051

6. The graph shows the number of votes for each person in a school election.


Which student won the election?

## Ana

1. A librarian has 883 books to shelve. Each shelf holds 98 books. How many books will be left over after filling as many shelves as possible?
(A) 1

B 9
C 89
D 97
2. A marina has 16 docks. Each dock has room for the same number of boats. When 101 boats sail in, they fill all the docks, with 5 boats left over. How many boats are in each dock?

A 21
B 11
(C) 6

D 5
3. Jordan hikes $1 \frac{1}{2}$ miles along a nature trail. Which point best represents $1 \frac{1}{2}$ on the number line?


A Point $P$
B Point $Q$
(C) Point $R$

D Point $S$
4. A store gets a delivery of 347 boxes. The manager organizes all the boxes by putting 72 boxes in each of the store's warehouses and 59 boxes in the store's basement. How many warehouses does the store have?
$\qquad$
5. A school band raises $\$ 615$ to buy new drums. How many drums can the band buy for $\$ 84$ each?

7
6. Subtract.
43.02 - 37.57
5.45
$\qquad$

1. Mr. Lee drives an average of 58 miles per hour. Which best describes how long he will take to drive 805 miles?
A Almost 52 hours
B Almost 51 hours
C Almost 14 hours
D Almost 13 hours
2. A school auditorium has 966 seats in 42 equal rows. How many seats are in each row?
(A) 23

B 24
C 42
D 43
3. A store clerk makes a display with 36 bags of beads. Each bag has 48 beads. How many beads are in the display?
(A) 1,728

B 1,488
C 432
D 372
4. Ms. Tanaka has $\$ 157$ to spend on lunches this month. How many times this month can she buy a \$13 lunch?

$$
12
$$

5. The table shows the number of stars in four galaxies.

| Galaxy | Number of Stars |
| :---: | :---: |
| Galaxy J | $815,234,796,002$ |
| Galaxy K | $851,243,679,010$ |
| Galaxy L | $815,234,769,120$ |
| Galaxy M | $851,432,697,201$ |

List the galaxies in order from the least number of stars to the greatest number of stars.

L, J, K, M
6. James runs on Monday and Tuesday. On Tuesday, he runs for 3 times as many minutes as he runs on Monday. What information do you need to find out the total time James runs on the two days? The number of minutes James runs on Monday

1. The table shows the amount of fish caught by three fishing boats.

Fishing Totals

| Boat | Pounds of Fish |
| :---: | :---: |
| Mary B. | 5,915 |
| Sea Raider | $?$ |
| Clear Skies | 3,276 |

The Mary B. caught about 12 times as much fish as the Sea Raider. About how many pounds of fish did the Sea Raider catch?
(A) About 500 pounds

B About 600 pounds
C About 5,000 pounds
D About 6,000 pounds
2. The Clear Skies sold the same amount of its fish to 28 seafood restaurants. If they sold all their fish, how many pounds did each restaurant buy?
A 128 pounds
(B) 117 pounds

C 110 pounds
D 101 pounds
3. How many more pounds of fish did the Mary B. catch than the Clear Skies?
A 1,629 pounds
B 1,729 pounds
(C) 2,639 pounds

D 2,761 pounds
4. A paper factory makes 8,423 sheets of paper in 45 minutes. How many sheets of paper does the factory make in 1 minute? Round to the nearest hundredth if necessary.

### 187.18 sheets

5. Lila rolls a number cube two times. The first time she gets a 3 . List all the possible outcomes of Lila's two rolls.
$3,1 \quad 3,23,3$

## $3,4 \quad 3,5 \quad 3,6$

6. Nat has a rope that is 3.6 meters long. He cuts the rope into two pieces. One piece is 1.925 meters long. How long is the other piece of the rope?
```
1 . 6 7 5 ~ m
```

7. What is the value of the underlined digit below?

65,208,193,977
two hundred
million

1. Celia has listened to $\frac{5}{14}$ of the songs on her new CD. Which equation could Celia use to find $s$, the fraction of the songs she has left to listen to?
A $\frac{5}{14}+s=\frac{9}{14}$
(B) $\frac{5}{14}+s=\frac{14}{14}$

C $\frac{9}{14}+s=\frac{14}{14}$
D $\frac{14}{14}+s=\frac{5}{14}$
2. The table below shows how far each skater in a 1-mile race has traveled.

Skating Race

| Skater | Ray | Scott | Theo | Walt |
| :---: | :---: | :---: | :---: | :---: |
| Distance <br> (miles) | $\frac{2}{5}$ | $\frac{3}{10}$ | $\frac{1}{2}$ | $\frac{1}{10}$ |

If none of the skaters pass each other, which skater will win the race?
A Ray
B Scott
(C) Theo

D Walt
3. A dolphin swims 26 miles per hour. How far could a dolphin swim in 9 hours?
A 125 miles
B 184 miles
C 234 miles
D 269 miles
4. Jack needs to finish $\frac{5}{8}$ of a school project by Monday. So far he has done $\frac{3}{8}$ of the project.
a. Draw a rectangle to show Jack's project. Shade the fraction that Jack has finished so far.

b. What fraction of the project does Jack have left to do by Monday? Write your answer in simplest form.

5. The giant tortoise can move at speeds of up to 0.17 miles per hour. The top speed for a greyhound is 39.35 miles per hour. How much greater is the greyhound's speed than the tortoise's?

### 39.18 miles per hour

6. A school needs 75 light bulbs. Bulbs come in packages of 8. How many packages should the school order?
10
7. Derrick is 13 inches taller than his little brother Cedric. Let $c$ be Cedric's height. Which gives Derrick's height?
(A) $c+13$

B $c-13$
C $13-c$
D $13 \div c$
2. Mr. Alvarez buys a table, 4 chairs, and a china cabinet for his dining room. What fraction of these pieces of furniture are chairs?
A $\frac{1}{4}$
B $\frac{1}{3}$
(C) $\frac{2}{3}$

D $\frac{3}{4}$
3. Shante and Dawn go out for dinner. Shante's meal costs \$12.45, and Dawn's meal costs $\$ 13.29$. What is the cost of the two meals together?
A $\$ 25.64$
(B) $\$ 25.74$

C $\$ 35.64$
D $\$ 36.74$
4. Marnie's score on a test is $s$. Lisa's score is 7 points less than Marnie's score. Write an expression that gives Lisa's score.

$$
s-7
$$

5. A rocket travels $147,098,074$ kilometers from Planet A to Planet B. Another rocket travels 152,097,701 kilometers from Planet A to Planet C. How much farther did the second rocket travel?

## 4,999,627 kilometers

6. Sarah chooses 3 of these cards.


List all the different groups of 3 cards that Sarah could choose.
1, 2, 3; 1, 2, 4;
1, 2, 5; 1, 3,4;
1, 3, 5; 1, 4, 5;
2, 3, 4; 2, 3, 5;
$2,4,5 ; 3,4,5$

1. Kayla plays a game with colored cards. She gets 4 points for each blue card. Which expression tells her total points when she has $b$ blue cards?
A b
(B) $4 b$

C $4-b$
D $4 b+b$
2. The map shows bike paths through a city park.


Which two paths appear to be parallel?
A Hill and Rocky
B Speed and Hill
C Shortcut and Speed
(D) Rocky and Shortcut
3. A town charges a sales tax of $\$ 0.0825$ for every dollar spent. What is this amount rounded to the nearest hundredth?
A $\$ 0.09$
(B) $\$ 0.08$

C $\$ 0.03$
D $\$ 0.01$
4. A farmer has a apples. She puts them in 36 baskets. Each basket has the same number of apples. Write an expression that gives the number of apples in 1 basket.

## $a \div 36$

5. The thermometer shows the temperature at noon. The temperature drops $19^{\circ} \mathrm{F}$ by midnight. What is the temperature at midnight?


## $58^{\circ} \mathrm{F}$

6. Last year, Alvin worked 12 hours each week for 50 weeks. How many hours did Alvin work last year?
600 hours
$\qquad$
7. Which answer shows the algebraic expression for the following phrase?
Five times a number plus three
(A) $5 n+3$

B $5+3 n$
C $5 \times 3+n$
D $5+n \times 3$
2. Evaluate the following expression. $(32+12)-17$

A 37
B 33
C 28
(D) 27
3. Evaluate the following expression for $y=11$.
$63-4 y$
A 18
(B) 19

C 21
D 29
4. To complete a project, Roshan must spend 3 hours on research and 2 hours writing each page. Write an expression for the total hours she needs.

## $3+2 p$

Use the expression to evaluate for 12 pages.

## 27 hours

Use the expression to evaluate for 21 pages.

## 45 hours

5. Evaluate the following expressions for $x=33$.

## $288-4 x$

156
$10 x+17$
347
$8 x-201$
63

1. Giancarlo and his friends are getting ready for a costume party. They buy 6 packages of fake noses and 8 packages of masks.
Each package contains 2 sets. Use the Distributive Property to find the answer that shows how many sets of costume party items Giancarlo and his friends have bought altogether.
(A) 28

B 22
C 20
D 16
2. Which answer shows how you can use the Distributive Property to find the product of $16 \times 34$ ?
A $(10 \times 30)+(6 \times 4)$
B $(10 \times 34)+(16 \times 4)$
C $(16 \times 3)+(16 \times 4)$
(D) $(16 \times 30)+(16 \times 4)$
3. Evaluate the following expressions, using the parentheses to choose which operations to solve first.

4. Rewrite the problem using the Distributive Property, and then find the product.
$607 \times 20$
$(600 \times 20)+$
$(7 \times 20)=12,000$ $+140=12,140$
5. Use the Distributive Property to fill in the blanks.

$$
\begin{aligned}
411 \times 8 & =(400 \times 8)+(11 \times 8) \\
& =\mathbf{3 , 2 0 0}+88 \\
& =3,288
\end{aligned}
$$

1. Which answer shows the operation that should be done first in the following expression?

$$
15-(16 \div 4)+(5 \times 2)
$$

A addition
B subtraction
C multiplication
(D) division
2. Using the order of operations, which answer shows the correct value of the following expression? $22+(8-5) \times(12 \div 3)$

A 10
(B) 34

C 40
D 100
3. Which answer is correct?

$$
(45-16)-12
$$

A 41
B 27
C 19
(D) 17
4. Pam's suitcase can weigh up to 50 pounds. She is planning to pack 5 school books, each of which weighs 2 pounds. She will also pack 3 notebooks weighing 1 pound each, and 6 boxes of golf balls weighing 2 pounds each. Her clothing weighs a total of 16 pounds. Write and evaluate an expression to show how many pounds Pam has to pack.
$(5 \times 2)+(3 \times 1)+$
$(6 \times 2)+16=41$

## pounds

Will Pam's suitcase be under the 50-pound weight limit?
Yes, $41<50$

## pounds.

5. Insert parentheses to make each statement true.

$$
\begin{aligned}
& 47-(36 \div 12)=44 \\
& 18-(2+16)=0 \\
& (50 \div 2)+5=30 \\
& 14 \div(7 \times 2)=1
\end{aligned}
$$

1. Dr. Gallo's waiting room has a total of 18 magazines, including 3 fashion magazines. There are 5 more cooking magazines than there are decorating magazines. How many decorating magazines are there? You can use cubes to act out the problem.
(A) 5

B 6
C 10
D 15
2. Gisela is putting her 35 CDs into categories. She has 11 that are pop music, and she has 3 times as many rock CDs as she has classical. How many rock CDs does Gisela have? You can use cubes to act out the problem.
A 24
B 20
(C) 18

D 6
3. An order comes in to Extreme Skate Co. for 56 pairs of its most popular skate shoes, including 14 pairs of grey. The order calls for 4 times as many hot pink pairs as red pairs, and 3 more pairs of black than grey. How many pairs of hot pink shoes were ordered?
A 5
(C) 20
B 17
D 42
4. Arturo's Nursery has 48 tree seedlings ready to sell. There are 16 magnolia seedlings. There are 2 times as many dogwood seedlings as oak seedlings. There are 2 more magnolia seedlings than pine seedlings. How many of each type of seedling is ready to sell? Use the table.

| Seedling | Number Ready to Sell |
| :--- | :---: |
| Magnolia | 16 |
| Dogwood | 12 |
| Oak | 6 |
| Pine | 14 |

5. Mr. Canela's 42 students voted on a class mascot. The gorilla received 8 votes. The python received 3 times as many votes as the giraffe, and the crocodile received 2 more votes than the gorilla. How many votes did each animal receive? Use the table.

| Mascot | Number of Votes |
| :--- | :---: |
| Gorilla | 8 |
| Python | 18 |
| Giraffe | 6 |
| Crocodile | 10 |

1. Use mental math to find the product.
$9.3 \times 100$

A 0.093
B 93
(C) 930

D 9,300
2. Saul earns $\$ 25.75$ each time he takes care of the Norman family's pets over a long weekend. If he takes care of the Normans' pets for 10 long weekends this year, how much money will he have earned?

A $\$ 2,575.00$
(B) $\$ 257.50$

C $\$ 35.75$
D $\$ 2.575$
3. Find the difference.
$54.59-26.61$

A 81.20
B 38.98
C 32.18
(D) 27.98
4. Kelvin rides the bus 7.78 miles to school each day. After 100 days of riding the bus, how many miles has he spent on the bus on the way to school?

## Kelvin has spent <br> $7.78 \times 100=778$ miles on the bus.

5. Use mental math to find each product.
$0.07 \times 10$
$4.41 \times 100$
$0.058 \times 1,000$
$12.77 \times 100$
$0.26 \times 1,000$
$0.003 \times 10$
0.7

441
58
1,277
260
0.03

1. Find the product.
$6.5 \times 5$
A 33.5
(B) 32.5

C 32.0
D 30.5
2. Zoe plants a sunflower seed and tracks its growth. The seedling measures 3.71 inches after the first month. If Zoe's plant grows 3.71 inches each month for 12 months, how many inches tall will it be at the end of one year?
A 10.13 inches
B 34.52 inches
C 43.52 inches
(D) 44.52 inches
3. Find the sum.
$68.47+121.35$
A 52.88
B 63.98
C 189.72
(D) 189.82
4. Maria Elena is planning to paint a horizontal stripe around the middle of her bedroom. Each of her 4 walls measures 168.2 inches. How many inches long will the stripe be?

## $168.2 \times 4=672.8$ inches

5. Find each product.

$$
\begin{aligned}
& 7.1 \times 4 \underline{28.4} \\
& 0.33 \times 9 \underline{2.97} \\
& 18.2 \times 7 \underline{127.4} \\
& 0.078 \times 2 \underline{0.156} \\
& 42.6 \times 3 \underline{127.8} \\
& 23 \times 0.05 \underline{1.15} \\
& 380 \times 0.006 \underline{\mathbf{2 . 2 8}} \\
& 6,400 \times 0.2 \underline{1,280}
\end{aligned}
$$

1. Ms. MacDowell is buying her class of 27 students end-of-year gifts. Each gift costs \$3.39, including tax. About how much is Ms. MacDowell spending on gifts for her students? Use the rounding strategy.

A about $\$ 60$
B about $\$ 80$
(C) about $\$ 90$

D about $\$ 100$
2. Estimate the product using compatible numbers.
$0.67 \times 623$
(A) about 420

B about 360
C about 42
D about 36
3. Find the difference: $73.92-49.63$.

A 34.39
B 34.29
C 24.39
(D) 24.29
4. Estimate each product using rounding or compatible numbers.
$0.67 \times 322 \underline{210}$
$3.12 \times 71 \underline{210}$
$18.88 \times 23400$
$207 \times 0.51100$
$0.165 \times 44 \underline{8}$
$0.42 \times 2510$
$1.91 \times 7871,600$
5. For math class, Boone is using his shoe to measure one of his classroom walls. He finds that the wall is 27 shoes long. His shoe measures 9.8 inches long. Use compatible numbers to find about how many inches long the wall is.
$27 \times 10=$ about
270 inches long

1. A computer can load 1,247 megabytes in 40 seconds. Which best describes the loading speed of the computer?
A Around 20 megabytes per second
B Nearly 28 megabytes per second
(C) Close to 31 megabytes per second
D More than 40 megabytes per second
2. The table shows the number of square feet painted by three house painters.

| Painter | Qquare Feet <br> Painted | Days <br> Worked |
| :--- | :---: | :---: |
| Megan | 604 | 5 |
| John | 521 | 4 |
| Cathy | 460 | 3 |

Which best describes John's average painting speed?

A Almost 120 square feet per day
(B) Almost 130 square feet per day

C Almost 140 square feet per day
D Almost 150 square feet per day
3. A model of 1 -foot cubes is shown below.


What is the volume of this model?
A 50 cubic feet
B 44 cubic feet
C 40 cubic feet
D 34 cubic feet
4. List the painters in Question 2 in order from slowest to fastest average painting speed.

## Megan, John,

## Cathy

5. A business earns $\$ 63,745$ in March and \$81,239 in April. How much money did the business earn during these two months?

## \$144,984

6. The graph shows the number of votes for each person in a school election.


Which student won the election?

## Amelia

$\qquad$

1. Which shows the correct quotient?
$56.78 \div 100$
A 0.05678
(B) 0.5678

C 5.678
D 567.8
2. Ma'Kayla's project group earns 989.25 points out of 1,000 on their Communities project. The points are to be divided evenly among the 10 people in her group. How many points will each member of the group receive?
A 9,892.5
(B) 98.925

C 9.8925
D 0.98925
3. Find 123.63 - 98.71.
(A) 24.92

B 35.12
C 35.92
D 222.34
4. Lam wants to earn enough money to buy a robot. The robot he wants costs $\$ 289.95$. He decides to try to earn the money in 100 days. How much money will Lam need to earn each day in order to have the full amount in 100 days? Round your answer to the nearest cent.

## $\$ 289.95 \div 100=$ <br> \$2.8995, \$2.90 per day.

5. Find the quotients.

| $35.86 \div 10$ | $\underline{3.586}$ |
| :--- | :--- |
| $9.55 \div 1,000$ | $\underline{0.00955}$ |
| $257.16 \div 100$ | $\underline{2.5716}$ |
| $1.805 \div 1,000$ | $\underline{0.001805}$ |
| $710.5 \div 10$ | $\underline{71.05}$ |
| $0.742 \div 1,000$ | $\underline{0.000742}$ |
| $9.3 \div 100$ | $\underline{0.093}$ |

1. Which answer shows the correct quotient?
$7 0 \longdiv { 3 . 5 }$
A 5
B 0.5
C) 0.05

D 0.005
2. Mrs. Mistry's subscription to the newspaper costs $\$ 26.75$ for 5 months. How much money is she paying each month?
A $\$ 0.53$
B $\$ 0.54$
(C) $\$ 5.35$

D $\$ 5.37$
3. Round each number to the nearest whole number, then find the difference.
$23.89-19.12=?$
A about 6
(B) about 5

C about 4
D about 3
4. Four of Carolina's friends are throwing her a surprise birthday party. The total cost of the cake, the decorations, and the present is $\$ 94.28$. How much will each of the four friends have to pay?

## $\$ 94.28 \div 4=$

 \$23.57 each5. For each of the following problems, find the quotient.
$1 2 \longdiv { 2 . 4 }$
0.2
$8 0 \longdiv { 4 . 8 }$
$6 \longdiv { 7 2 . 6 }$
$3 0 \longdiv { 1 . 2 }$
$8 0 \longdiv { 4 6 . 6 8 }$
$2 0 \longdiv { 2 3 2 . 6 2 }$
6. Estimate the quotient: $9.43 \div 3$.
(A) about 3

B about 6
C about 10
D about 27
2. In the 6 months Angie has spent preparing to run a marathon, she has run 780.3 miles. About how many miles has Angie run each month?
A about 200 miles
(B) about 130 miles

C about 80 miles
D about 78 miles
3. Find $251.9+37.7$.

A 214.2
B 288.6
(C) 289.6

D 628.9
4. Ty's 3 dogs eat 47.75 pounds of dog food each week all together. About how many pounds does each dog eat each week? about 16 pounds
5. Estimate the quotients.
$73.61 \div 2$
$399.7 \div 5$
$118.51 \div 4$
$39.74 \div 40$
$192.78 \div 45$
35
80
30

6. Soledad has saved $\$ 36.25$, which she uses to buy 4 nail polish sets at her favorite store. About how much did she spend on each nail set? about \$9

1. Find the quotient.
$2.7 \div 0.9$
A 30
(B) 3

C 0.3
D 0.03
2. Benjamin finished his triathlon in 12.44 hours. During the race, he drank 460.28 fluid ounces of liquid. How many fluid ounces did he drink per hour?

A 3.7 fl oz
B 3.788 fl oz
(C) 37 fl oz

D 37.88 fl oz
3. Which answer is correct?
347.14 - 58.71

A 311.63
B 299.43
C 298.43
(D) 288.43

For 4 and 5, use the chart below.

| Candy | Price per Piece |
| :--- | :---: |
| Gumballs | $\$ 0.08$ |
| Sour Straws | $\$ 0.04$ |
| Jawbreakers | $\$ 0.40$ |
| Licorice Rope | $\$ 0.16$ |

4. Tania brings $\$ 8.32$ to the candy store. She wants to buy 21 jawbreakers. Does she have enough money? Round your answer down to the nearest whole number.

## No; sample

 answer: \$8.32 $\div$ $\$ 0.40=20.8 ;$ Tania can buy only 20 jawbreakers.5. Tania divides her money into two equal amounts. How many sour straws can she buy with half of her money? How many licorice ropes can she buy with the second half of her money?

## 104 sour straws; 26 licorice ropes

1. Ms. Avery drives an average of 45 miles per hour. Which expression tells how many miles Ms. Avery can go if she drives for $h$ hours?
(A) 45 h

B $45+h$
C 45 -h
D $\frac{45}{h}$
2. Nick and Juan each buy 4 shirts. Nick spends \$3 less than Juan spends. Let $n$ be the amount Nick spends. Which shows Juan's spending?
A $n-3$
(B) $n+3$

C $n-3+4$
D $n+3-4$
3. A catfish restaurant has 154 pounds of catfish in the kitchen.
A Family Catfish Dinner uses 4 pounds of catfish. How many Family Catfish Dinners can the restaurant make?
A 11
B 13
(C) 38

D 39
4. Lisa buys a 50 -pound bag of dog food.
a. Write an expression that tells how many weeks the bag will last if Lisa's dog eats $p$ pounds of food each week.

b. If the dog eats 7 pounds of food each week, will the bag last for 8 weeks? Explain.

weeks, which is less than 8 weeks.
5. A motel charges $\$ 87$ per night for a room, including tax. What is the cost of a room for 3 nights?

## \$261

6. A school has 918 students. The same number of students eat lunch during each of the school's three lunch periods. How many students eat lunch during one lunch period? 306
7. The drawing shows a bookshelf.


Which is a pair of perpendicular lines?
A $\overleftrightarrow{A D}$ and $\overleftrightarrow{B C}$
B $\overleftrightarrow{B C}$ and $\overleftrightarrow{E F}$
(C) $\overleftrightarrow{E F}$ and $\overleftrightarrow{F G}$

D $\overleftrightarrow{F G}$ and $\overleftrightarrow{A B}$
2. The table shows Keith's height above the ground as he climbs the steps of a ladder.

| Steps <br> (s) | Height in inches <br> $(\boldsymbol{h})$ |
| :---: | :---: |
| 0 | 0 |
| 1 | 8 |
| 2 | 16 |
| 3 | 24 |
| 4 | 32 |

Which equation shows the relationship between Keith's height above the ground and the number of steps he climbs?
A $h=s+8$
(B) $h=8 s$

C $s=h+8$
D $s=8 h$
3. The drawing shows line segment $\overline{R S}$.
a. Draw line $\overleftrightarrow{T U}$ parallel to $\overline{R S}$.
b. Draw ray $\overrightarrow{T W}$ intersecting $\overrightarrow{R S}$.

## Possible Answer:


4. The Howard family has $\$ 200$ to pay bills. They spend $\$ 40$ to pay the phone bill, $\$ 100$ for groceries, and $\$ 60$ for electricity. What fraction of the $\$ 200$ does the family spend on groceries and electricity? Write your answer in simplest form.
$\frac{4}{5}$
5. Students at Martin Elementary go to school 180 days of the year. What fraction of the year do the students go to school? Write your answer in simplest form.

1. The hands of a clock at $6: 00$ form a straight angle.


What is the measure of this angle?
A less than $90^{\circ}$
B $90^{\circ}$
C between $90^{\circ}$ and $180^{\circ}$
(D) $180^{\circ}$
2. The table shows the cost of a yard service based on the amount of time the service spends on a yard.

| Hours | Cost |
| :---: | :---: |
| 3 | 18 |
| 4 | 24 |
| 6 | 36 |
| 8 | 48 |

Which expression tells the amount the service charges for $h$ hours of work?
(A) $6 h$
C $h+6$
B $15 h$
D $h+15$
3. A copy machine can make 742 copies in 53 minutes. How many copies can the machine make in 1 minute?
A 11
C 104
(B) 14
D 114
4. a. Draw an acute angle.

## Student should draw an angle measuring less than $90^{\circ}$.

b. Use a protractor to find the measure of the angle you have drawn.

My angle measures $\qquad$ $\therefore$.
5. In a science experiment, the temperature of a sample increased $\frac{2{ }^{\circ}}{10} \mathrm{~F}$ during the first hour. At the end of the second hour, the temperature increased another $\frac{6}{10}{ }^{\circ}$. What was the total temperature increase for the hours? Write your answer in simplest form.

6. On Monday, the price of one share of Webb Company stock was 24.85. By Friday, the price was 25.004. By how much did the price change from Monday to Friday?
0.154
$\qquad$

1. The shape below is a regular octagon. Which must be true about the measure of $\angle A B C$ ?


A It must equal the sum of $\overline{A B}+\overline{B C}$.
B It must equal the sum of $\overline{G F}+\overline{F E}$.
C It must equal the measure of $\angle A C E$.
(D) It must equal the measure of $<G F E$.
2. Which lists all the line segments in the drawing?


A $\overline{W X}$
B $\overline{W X}, \overline{Y Z}$
(C) $\overline{W X}, \overline{X Z}, \overline{Y Z}, \overline{W Y}$

D $\overline{W X}, \overline{X Z}, \overline{Y Z}, \overline{W Y}, \overline{W Z}, \overline{X Y}$
3. Draw an irregular hexagon.

## Student should draw a closed, six-sided plane figure with at least one pair of non-congruent sides or angles.

4. Ms. Wilson shows her cooking class how to make four different kinds of bread. The table shows the amount of flour for each.

| Bread | Flour (cups) |
| :--- | :---: |
| Bagels | $3 \frac{1}{3}$ |
| Biscuits | $2 \frac{3}{4}$ |
| Pizza crust | $3 \frac{2}{3}$ |
| Rolls | $3 \frac{1}{2}$ |

List the breads in order from the one using the most to the least flour.
pizza crust, rolls,
$\qquad$

1. The map shows three streets that intersect to form a triangle.


Big Avenue and Pecan Road make a $130^{\circ}$ angle. Which could be the measure of the angle made by Pecan Road and Main Street?
(A) $20^{\circ}$

B $50^{\circ}$
C $130^{\circ}$
D $180^{\circ}$
2. Nina draws a closed shape with 5 sides. What did she draw?

A Hexagon
B Nonagon
C Octagon
(D) Pentagon
3. Consuela is 7 inches taller than Erin. Let e be Erin's height. Which expression tells Consuela's height?
A $e-7$
(B) $e+7$

C $7-e$
D $7 \times e$
4. Circle two words from the list below that tell what kind of triangle this is.

5. Jessie uses $4 \frac{2}{4}$ square yards of cloth to make a choir robe. Write $4 \frac{2}{4}$ as an improper fraction in simplest form.

6. Draw a factor tree to show the prime factors of 120 .

## Possible answer:



1. The drawing shows a school playground.


The north and south sides of the playground are parallel, but the east and west sides are NOT parallel. What is the shape of the playground?

A Square
B Rhombus
(C) Trapezoid

D Parallelogram
2. Lia uses a protractor to measure $\angle A B C$.


What is the measure of $\angle A B C$ ?
A $25^{\circ}$
(B) $65^{\circ}$

C $115^{\circ}$
D $245^{\circ}$
3. In this parallelogram $\angle S$ and $\angle Q$ have the same measure. What is the measure of $\angle Q$ ?

$75^{\circ}$
4. A computer room has 12 computers. The room is open for 4 hours each day. Twenty-five students sign up for computer time. Each student gets the same number of minutes. What is the greatest whole number of minutes each student can get?

## 115 minutes

5. At a track meet, Travis jumps 1.03 meters in the high jump. Andrew jumps 1.32 meters. How much higher does Andrew jump?

### 0.29 meter

6. A book has 84 pages. Each page has an average of 437 words. How many words are in the book?

## 36,708 words

$\qquad$

1. The drawing shows a brick wall.


How many walls just like this one could you build with 542 bricks?
Let $w$ be the number of walls.
Which equation could you use to find $w$ ?

A $16 \times 542=w$
B $16+542=w$
(C) $542 \div 16=w$

D $542-16=w$
2. The table shows weights of equal amounts of various beans in bags.

Weights of Bags of Beans

| Bean | Weight <br> (pounds) |
| :--- | :---: |
| Black | 0.012 |
| Green | 0.002 |
| Kidney | 0.022 |
| Garbanzo | 0.020 |

Which bag of beans is the heaviest?

A Black
B Garbanzo
C Green
(D) Kidney
3. A pet store has 54 goldfish in 9 tanks. Each tank holds the same number of goldfish. How many goldfish are in each tank?

```
6
```

4. Bob uses 3 slices of bread to make a club sandwich. How many club sandwiches can Bob make from 35 slices of bread?
$\qquad$ 11
5. The wingspan of a bald eagle can be up to 215.9 centimeters. What is the value of the digit 9 in this length?
nine tenths
6. The drawing shows Rob's socks.


What fraction of Rob's socks are black?
(A) $\frac{2}{7}$

B $\frac{2}{5}$
C $\frac{5}{7}$
D $\frac{7}{2}$
2. Ann fills in the word puzzle below.

| P | A | T |
| :---: | :---: | :---: |
| A | T | E |
| T | E | A |

In what fraction of the puzzle squares did Ann write a vowel?

A $\frac{4}{9}$
(B) $\frac{5}{9}$

C $\frac{5}{4}$
D $\frac{9}{5}$
3. Shade $\frac{3}{8}$ of this circle.

4. Coach Jenkins teaches her physical education students a new sport every 30 days. After 120 days, how many new sports will Ms. Jenkins have taught?

$$
4 \text { sports }
$$

5. A bag of dog food weighs 45 pounds. An animal doctor's office uses 9 pounds of dog food each day. How many days will one bag of dog food last?

5 days
$\qquad$

1. Jaime is $\frac{1}{4}$ of the way through with the book he is reading. Which point shows $\frac{1}{4}$ on the number line?

(A) $w$

B $X$
C Y
D Z
2. Kirk, Tanya, Ben, Maya, and Rico equally share 3 apples. What fraction of an apple does each person get?
A $\frac{1}{3}$
B $\frac{3}{8}$
(C) $\frac{3}{5}$

D $\frac{5}{8}$
3. Jana is 6 times as old as Nina. Let $n$ be Nina's age. Which gives Jana's age?
A $6+n$
(B) $6 \times n$

C $n-6$
D $n \div 6$
4. Vince and Wes ride in a bicycle race. Vince is $\frac{2}{5}$ through the race. Wes is $\frac{1}{3}$ through the race. Which racer is ahead? Mark the position of each racer on the drawing below to justify your answer.


## Vince is ahead.

5. What fraction of these faces are smiling?

6. The table shows the price of different lengths of the same fabric.

| Length <br> (yards) | 3 | 5 | 6 | 8 |
| :---: | :---: | :---: | :---: | :---: |
| Price | $\$ 9$ | $\$ 15$ | $\$ 18$ | $?$ |

What should the clerk do to find the price of 8 yards of the fabric?
Multiply 8 by \$3.
$\qquad$

1. Eric uses $3 \frac{5}{8}$ yards of material to make a shirt. Which is $3 \frac{5}{8}$ written as an improper fraction?
A $\frac{16}{8}$
(B) $\frac{29}{8}$

C $\frac{35}{8}$
D $\frac{43}{8}$
2. During a school food drive, the 5th grade collects 512 pounds of food. The 6th grade collects 448 pounds of food. About how much more food does the 5th grade collect than the 6th grade?
A 150 pounds
B 100 pounds
C. 50 pounds

D 10 pounds
3. Rita hikes $3 \frac{1}{2}$ miles on a nature trail. How many $\frac{1}{2}$-mile long sections of the trail did Rita hike?
A 2
B 3
C 6
(D) 7
4. The drawing shows the number of tablespoons (T) of oil Petra uses to make a soup. Write the number of tablespoons Petra uses as an improper fraction and as a mixed number.
$\underbrace{}_{1 / 4 \mathrm{~T} O}$


1/4 T O

$\frac{7}{4} ; 1 \frac{3}{4}$
5. List these numbers in order from least to greatest.
6.305, 6.35, 6.035, 6.5

### 6.035, 6.305,

6.35, 6.5
6. Draw a point at $3 \frac{1}{2}$ on the number line below.


1. A nature trail is 15 miles long. Seth and Micah hiked 5 miles on the trail. What fraction of the trail did they hike?

A $\frac{1}{20}$
B $\frac{1}{15}$
C $\frac{1}{5}$
(D) $\frac{1}{3}$
2. Taryn has a watering can with 32 fluid ounces of water in it. She pours 8 fluid ounces of the water onto a plant. What fraction of the water does she pour?

A $\frac{1}{2}$
(B) $\frac{1}{4}$

C $\frac{1}{8}$
D $\frac{1}{16}$
3. A letter carrier delivers 350 letters in 70 minutes. What is the carrier's average number of letters delivered per minute?
A 50
B 20
(C) 5

D 2
4. Maya has a bag of 100 pretzels. She shares 25 pretzels with her friends. What fraction of the pretzels are left in the bag? Write two equivalent fractions to represent your answer.

## Sample answers:


5. The Carter family has 5 children. Two of the children are boys. Use this number line to show the fraction of the children in the Carter family who are girls.

6. List the number of faces, edges, and vertices in this rectangular prism.


Faces:
Edges:
6 faces

Vertices:


1. Choose the answer that shows the numbers in order from least to greatest.
(A) $\frac{5}{8}, \frac{2}{3}, 1 \frac{3}{4}, 1 \frac{12}{14}$

B $\frac{2}{3}, \frac{5}{8}, 1 \frac{3}{4}, 1 \frac{12}{14}$
C $\frac{2}{3}, \frac{5}{8}, 1 \frac{12}{14}, 1 \frac{3}{4}$
D $\frac{5}{8}, \frac{2}{3}, 1 \frac{12}{14}, 1 \frac{3}{4}$
2. Bae has to travel $4 \frac{7}{8}$ miles from his house to get to his best friend's house, $4 \frac{5}{6}$ miles to get to school, $4 \frac{3}{4}$ miles to get to the library, and $4 \frac{2}{3}$ miles to get to the nearest park. Which is the farthest from Bae's house?

A The nearest park
(B) His best friend's house

C The library
D School
3. Compare the following pairs of numbers. Write $<,>$, and $=$ for each $\bigcirc$.
$3 \frac{3}{4} \rightleftharpoons 3 \frac{12}{16}$
$1 \frac{4}{5} \geqslant \frac{12}{15}$
$\frac{9}{10} \bigotimes \frac{10}{12}$
4. Draw the same fraction in two different ways. (Example: 1 marble in a set of two represents $\frac{1}{2}$, and a triangle divided evenly in two parts, with one part shaded, also represents $\frac{1}{2}$.)

> The student can draw any two differing representations of the same fraction.

1. A store clerk makes a display with boxes of pens and pencils. The display contains 56 pens and 32 pencils. Each box holds only pens or only pencils. Each box holds the same number of pens or pencils. What is the greatest possible number of pens or pencils that the clerk can put in each box?
A 56
B 32
(C) 8

D 4
2. At the 2005 Texas Relays track meet, the winner of the Men's 100-Meter Dash finished in 10.06 seconds. What is the place value of the 6 in this time?
A Tens
B Tenths
C Hundreds
(D) Hundredths
3. This clock shows a movie's start time.


The movie lasts for 90 minutes. What time does the movie end?

A 1:25 Р.м.
B 2:15 р.м.
(C) 2:55 Р.м.

D 6:35 р.м.
4. For numbers less than 40 , list each pair of numbers that has a greatest common factor (GCF) of 12.

## 12 and 24; 12 and

## 36; 24 and 36

5. Write a number sentence that shows the Commutative Property of Addition.

## Any equation in the form $\mathbf{a}+\mathrm{b}=\mathrm{b}+\mathrm{a}$

6. Last year, $\frac{3}{8}$ of Ms. Oliver's students were boys. This year, she has the same number of students, and $\frac{9}{24}$ of them are boys. Draw a picture to show that Ms. Oliver has had the same fraction of boys each year.

7. A group of 36 students goes on a school field trip. Of all the students on the trip, 18 are in third grade. What is $\frac{18}{36}$ in simplest form?
A $\frac{1}{3}$
B $\frac{4}{12}$
C $\frac{8}{24}$
(D) $\frac{1}{2}$
8. Conor feeds his cats a total of 9 ounces of food each day. How many days will 414 ounces of food last?
A 21 days
B 27 days
(C) 46 days

D 49 days
3. In the year 2000, there were 1,631,192 Texans between 10 and 14 years old. What is the value of the digit in the ten-thousands place in $1,631,192$ ?
A Ten thousand
B Sixty thousand
(C) Thirty thousand

D Ninety thousand
4. What fraction of these boxes are open? Write your answer in simplest form.

$\frac{2}{5}$
5. Mr. Lou gets 385 free minutes each month on his cell phone plan. How many free minutes does Mr. Lou get in 7 months?

## 2,695 minutes

6. The table shows the total cost of large packages of blank CDs.

| Number of <br> Packages | 4 | 6 | 7 | 9 |
| :---: | :---: | :---: | :---: | :---: |
| Total Cost | $\$ 44$ | $\$ 66$ | $\$ 77$ | $?$ |

Describe how to find the cost of 9 large packages of blank CDs.
Multiply 11 by 9 to
get $\$ 99$.

1. A swimmer wins a race by $\frac{2}{10}$ of a second. Which decimal is equal to $\frac{2}{10}$ ?

A 0.02
(B) 0.20

C 2.00
D 2.10
2. A baker uses $\frac{10}{4}$ cups of flour to make bread. Which decimal is equal to $\frac{10}{4}$ ?

A 4.1
(B) 2.5

C 2.2
D 0.4
3. What fraction of this tile floor is white?


A $\frac{5}{12}$
B $\frac{12}{7}$
C $\frac{5}{7}$
(D) $\frac{7}{12}$
4. Marti's cat weighs 12.37 pounds. What is this weight written as a mixed number?

$$
12 \frac{37}{100}
$$

5. The table shows the cost of adult admissions to a state park.

| Number of <br> Adults | 4 | 5 | 7 | 9 |
| :---: | :---: | :---: | :---: | :---: |
| Total Cost | $\$ 16$ | $\$ 20$ | $\$ 28$ | $?$ |

What is the total cost for a group of 9 adults to go to the state park? \$36
6. What is the value of the underlined digit?

$$
34.205
$$

1. The drawing shows a stack of 1,000 bricks at a home improvement store.


A customer buys 15 bricks from the stack. Which decimal names the fraction of the stack that is left?

A 985,000.00
B 9,850.00
(C) 0.985

D 0.00985
2. Which best describes the black lines in this right triangle?


A Obtuse
B Parallel
C Reflections
(D) Perpendicular
3. What fraction of the drawing is shaded?

$\frac{3}{8}$
4. The table shows the area of four counties.

| County | Area <br> (square miles) |
| :--- | :---: |
| Bexar | 1,246 |
| El Paso | 1,013 |
| Travis | 989 |
| Williamson | 1,122 |

What is the total area of Travis County and Williamson County?

## 2,111 square miles

5. List the four counties in the table above in order from least to greatest area.

> Williamson, Bexar

A veterinarian weighed four cats. Use the data shown in the table for 1 through 3.

Weights of Cats

| Cat | Weight <br> (pounds) |
| :--- | :---: |
| Bob | 8.25 |
| Fluffy | $8 \frac{3}{4}$ |
| Miss Kitty | 8.5 |
| Tiger | 8 |

1. Which cat's weight does point $X$ name?


A Bob
B Fluffy
(C) Miss Kitty

D Tiger
2. Which cat's weight in the table above is closest to 9 pounds?
A Bob
(B) Fluffy

C Miss Kitty
D Tiger
3. What is the difference between Bob's weight and Miss Kitty's weight?
A 0.20 pounds
(B) 0.25 pounds

C 0.35 pounds
D 0.75 pounds
4. Plot 0.29 on the number line below.

5. The table shows the number of miles a taxi drives and the cost of the taxi ride.

| Distance <br> (miles) | 8 | 10 | 16 | 22 |
| :---: | :---: | :---: | :---: | :---: |
| Cost | $\$ 4$ | $\$ 5$ | $\$ 8$ | $?$ |

Describe how to find the cost of a 22-mile taxi ride?

## Divide 22 by 2: \$11

6. Write a whole number greater than 99,999,999 and less than 100,000,100.
Any whole number greater than or equal to 100,000,000 and less than or equal to 100,000,099
7. The shaded part of this map shows the area in Texas where rain fell yesterday.


Which best tells about the fraction of Texas that was rained on yesterday?

A Less than $\frac{1}{2}$ of the state
(B) About $\frac{1}{3}$ of the state

C Almost $\frac{3}{4}$ of the state
D Greater than $\frac{5}{6}$ of the state
2. The table shows the shoreline lengths for 4 of the 5 Great Lakes.

Shoreline Length

| Lake | Distance (feet) |
| :--- | :---: |
| Erie | $4,598,880$ |
| Huron | $20,206,560$ |
| Michigan | $8,648,640$ |
| Superior | $14,393,280$ |

Which lists the lakes in order from least to greatest shoreline length?

A Erie, Michigan, Huron, Superior
B Erie, Huron, Michigan, Superior
(C) Erie, Michigan, Superior, Huron

D Huron, Superior, Michigan, Erie
3. Lia's dog Jojo runs a race in 44.89 seconds. Jojo also gets
13.72 seconds of "mistake time." Jojo's final time is the sum of his race time and his "mistake time." What is Jojo's final time?

### 58.61 Seconds

4. When Lake Buchanan is full, it holds 285,304,056,700 gallons of water. What is this amount of water rounded to the nearest hundred million?

## 285,300,000,000

5. Draw a point at 4.2 on the number line below.

6. Find the sum in simplest form: $\frac{6}{15}+\frac{4}{15}$.

A $\frac{1}{3}$
B $\frac{10}{30}$
(C) $\frac{2}{3}$

D $\frac{10}{15}$
2. On Friday, Veruska reads $\frac{3}{14}$ of her book. On Saturday, she reads $\frac{5}{14}$ of the book. On Sunday, she reads another $\frac{2}{14}$. What fraction of the book has she read so far? Simplify your answer.

A $\frac{10}{14}$
(B) $\frac{5}{7}$

C $\frac{10}{42}$
D $\frac{5}{21}$
3. Which fraction represents the shaded part of the figure?


A $\frac{2}{5}$
(B) $\frac{3}{5}$

C $\frac{5}{3}$
D $\frac{5}{2}$
4. At the beginning of the week, the Roeder family had a full loaf of bread, 20 out of 20 pieces.
For lunches on Monday, 6 of the original 20 pieces were used. For Tuesday's lunch, 4 more pieces were used. What fraction of the original 20 pieces of bread are left for the rest of the week? Simplify your answer.
$\frac{20}{20}-\frac{6}{20}-\frac{4}{20}=\frac{10}{20} . \frac{1}{2}$

## of the bread is left.

5. Find each sum or difference.

Simplify your answer.

$\qquad$

1. Find the LCM of these numbers. 58

A 16
B 20
C 24
(D) 40
2. Isabel can buy ham in packages of 12 slices. She can buy tortillas in packages of 10 . What is the smallest number of ham slices and tortillas she can buy to have the same number of each for her ham rollups?

A 120
(B) 60

C 22
D 12
3. Which decimal is equal to $1 \frac{3}{4}$ ?
(A) 1.75

B 1.43
C 1.34
D 1.25
4. Casey's watch beeps every 15 minutes. Her brother's watch beeps every 10 minutes. The last time both watches beeped was at 5:30 Р.м. What time will it be the next time both watches beep at the same time?

## The next time both watches will beep at the same time will be at 6:00 P.м.

5. Find the LCM of each pair of numbers.

| 4 | 14 |
| :--- | :--- |
| 6 | 10 |
| 9 | 12 |
| 12 | 18 |
|  | 18 |
|  | 18 |
| 10 | 14 |
| 7 | 12 |

1. Find the sum in simplest form: $\frac{2}{3}+\frac{5}{6}$.

A $1 \frac{2}{3}$
(B) $1 \frac{1}{2}$

C $1 \frac{3}{6}$
D $1 \frac{1}{3}$
2. Ingrid takes her little sister Emma to the park. Emma spends $\frac{1}{5}$ of her time at the park on the slide and $\frac{3}{4}$ of her time at the park on the swings. How much of her time at the park does Emma spend on the slide and swings? Simplify your answer if necessary.

A $\frac{4}{20}$
B $\frac{4}{9}$
C $\frac{11}{20}$
(D) $\frac{19}{20}$
3. $-34>$ ?
(A) -38

B -30
C 0
D 21
4. Coach Ingrams orders 8 pizzas for the basketball team. Slim eats $\frac{3}{4}$ of a pizza. Stretch eats $\frac{5}{9}$ of a pizza. Hulk eats $\frac{2}{3}$ of a pizza. How much pizza do the three boys eat in all? Simplify your answer if necessary.

$$
\frac{3}{4}+\frac{5}{9}+\frac{2}{3}=\frac{27}{36}+
$$

$\frac{20}{36}+\frac{24}{36}=\frac{71}{36}=1 \frac{35}{36}$
pizzas in all
5. Find the sums. Simplify your answers if necessary.

$$
\begin{aligned}
& \frac{4}{5}+\frac{4}{7} \\
& \frac{2}{9}+\frac{3}{12} \\
& \frac{3}{4}+\frac{5}{14} \\
& \frac{1}{10}+\frac{5}{6}+\frac{2}{3} \\
& \frac{5}{6}+\frac{3}{8} \\
& \frac{1}{8}+\frac{2}{4}+\frac{3}{12} \\
& \frac{3}{10}+\frac{6}{14} \\
& \frac{2}{5}+\frac{4}{10}+\frac{4}{20}
\end{aligned}
$$

$\qquad$

1. Find the difference in simplest form:
$\frac{4}{12}-\frac{2}{9}$.
(A) $\frac{1}{9}$

B $\frac{2}{12}$
C $\frac{4}{36}$
D $\frac{12}{108}$
2. After Ronaldo's birthday party, $\frac{2}{3}$ of his cake is left. How much birthday cake will be left after his cousin Max eats another $\frac{1}{6}$ ? Simplify your answer if necessary.

A $\frac{5}{6}$
(B) $\frac{1}{2}$

C $\frac{1}{3}$
D $\frac{3}{12}$
3. $2.31>$ ?
(A) $2 \frac{1}{4}$

B $2 \frac{1}{3}$
C $2 \frac{1}{2}$
D $2 \frac{3}{5}$
4. Kamal has $\frac{6}{8}$ of his spring break left when he goes to visit his grandmother. He spends $\frac{4}{6}$ of spring break at her house. How much of Kamal's spring break is left after his visit with his grandmother? Simplify your answer if necessary.

$$
\frac{6}{8}-\frac{4}{6}=\frac{18}{24}-\frac{16}{24}
$$

$=\frac{2}{24}=\frac{1}{12}$ left
5. Find each difference. Simplify your answers if necessary.
$\frac{2}{3}-\frac{1}{5}$
$\frac{5}{8}-\frac{1}{3}$
$\frac{11}{14}-\frac{3}{4}$
$\frac{2}{6}-\frac{1}{5}$
$\frac{3}{8}-\frac{4}{12}$
$\frac{6}{10}-\frac{5}{14}$
$\frac{8}{12}-\frac{4}{18}$
$\frac{8}{10}-\frac{3}{12}$


1. Find the sum in simplest form: $1 \frac{1}{9}+2 \frac{1}{2}$.

A $7 \frac{2}{9}$
(B) $3 \frac{11}{18}$

C $3 \frac{2}{11}$
D $3 \frac{1}{6}$
2. Neil spends $1 \frac{1}{4}$ hours washing the car and $2 \frac{5}{8}$ hours mowing and weeding the yard. How many hours altogether does he spend on his chores? Simplify your answer if necessary.

A $3 \frac{3}{8}$
B $3 \frac{5}{8}$
C $3 \frac{6}{8}$
(D) $3 \frac{7}{8}$
3. Which of the fractions is equal to $\frac{4}{5}$ ?
(A) $\frac{16}{20}$

B $\frac{16}{25}$
C $\frac{12}{20}$
D $\frac{8}{15}$
4. Helena puts $10 \frac{6}{15}$ gallons of gas into her car at the beginning of the week. On Wednesday, she adds another $7 \frac{3}{5}$ gallons. How much gas has she put in her car in her two visits to the gas station? Simplify your answer if necessary.
Helena has put $10 \frac{6}{15}+$
$7 \frac{3}{5}=\frac{156}{15}+\frac{38}{5}=\frac{156}{15}+$
$\frac{114}{15}=\frac{270}{15}=18$ gallons
in her tank.
5. Find each sum. Simplify your answers if necessary.
$3 \frac{1}{4}+2 \frac{5}{6}$
$4 \frac{3}{5}+5 \frac{2}{8}$
$7 \frac{1}{6}+3 \frac{3}{9}$
$5 \frac{3}{12}+2 \frac{5}{8}$
$8 \frac{1}{4}+6 \frac{2}{5}$
$10 \frac{1}{2}+2 \frac{4}{5}$
$6 \frac{1}{3}+4 \frac{3}{4}$
$12 \frac{3}{12}+1 \frac{4}{9}$


1. Airport security guards choose some travelers for an extra safety check. So far, the guards have chosen the 6th, 12th, 18th, and 24th travelers in line. Which of these people will most likely be chosen for the extra safety check?

A The 25th traveler in line
B The 26th traveler in line
C The 30th traveler in line
D The 34th traveler in line
2. Shannon says, "My apartment number is a prime number." Which could be Shannon's apartment number?

A 115
B 273
(C) 317

D 414
3. Ms. Royal left for work at 7:48 A.M. She reached her office at 8:23 A.M. How long did Ms. Royal take to get to her office?

A 25 minutes
(B) 35 minutes

C 1 hour 25 minutes
D 1 hour 35 minutes
4. What are the next three numbers in this pattern?

5. The table shows how much work four students have done on their homework.

| Student | Number <br> of Pages <br> Done | Total <br> Number <br> of Pages <br> To Do |
| :---: | :---: | :---: |
| Gina | 1 | 3 |
| Marcus | 2 | 4 |
| Emily | 3 | 5 |
| Jaime | 4 | 6 |

List the students in order from greatest to least fraction of work done.

## Jaime, Emily, Marcus, Gina

6. Write $5 \frac{9}{25}$ as an improper fraction.

