Learn-to-Solve Word Problems

**Numbers and Operations**

Betsy’s neighbor told her that the population of the city that they live in is five million, four hundred eighty-six thousand, nineteen. What is the population of Betsy’s city rounded to the nearest hundred thousand?

1. What is the population of Betsy’s city written in standard form?
   - A. 5,486,191
   - B. 5,486,190
   - C. 5,486,019

3. Where should you look for the clue that tells you how to round the number in the hundred thousands place?
   - A. look to its right – the ten thousands place
   - B. look to its left – the millions place
   - C. look at it – the hundred thousands place

2. What number is in the hundred thousands place?
   - A. 5
   - B. 4
   - C. 8

4. What is the population of Betsy’s city rounded to the nearest hundred thousand?
   - A. 6,000,000
   - B. 5,500,000
   - C. 5,555,555

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Learn-to-Solve Word Problems

**Geometry**

Ricardo wants to sew a lace border around the edge of a pillow he made for his aunt. The lace costs $0.25 per inch. The pillow is 8 inches long and 5 inches wide. How much lace does Ricardo need?

1. What is a border?
   - A. the stuffing inside of a pillow
   - B. the cloth that covers the whole pillow
   - C. something that goes around the outside edge of the pillow

3. To determine how much lace he needs, Ricardo needs to find the pillow’s
   - A. volume
   - B. perimeter
   - C. area

2. What information is not needed to solve this problem?
   - A. The lace costs $0.25 per inch.
   - B. The pillow is 8 inches long.
   - C. The pillow is 5 inches wide.

4. How much lace does Ricardo need for the pillow’s border?
   - A. 13 inches
   - B. 26 inches
   - C. 40 inches
Learn-to-Solve Word Problems

Numbers and Operations

A science museum received 2,359,876 visitors in 2008 and 3,089,241 in 2009. Rounded to the nearest ten thousand, how many people visited the science museum in 2009?

1. How many visitors did the science museum receive in 2009?
   - A. 3,089,241
   - B. 2,359,876
   - C. 5,449,117

3. To determine whether to round up or round down in the ten thousands place, you need to check the
   - A. thousands place
   - B. ten thousands place
   - C. hundred thousands place

2. Which number is in the ten thousands place of the number of visitors in 2009?
   - A. 3
   - B. 0
   - C. 8

4. Rounded to the nearest hundred thousand, how many people visited the science museum in 2009?
   - A. 3,090,000
   - B. 3,100,000
   - C. 3,080,000

Learn-to-Solve Word Problems

Geometry

Mr. Macy has a rug in his classroom that is 6 feet long and 4 feet wide. What is the area of Mr. Macy’s rug?

1. Which model would help you determine the area of Mr. Macy’s rug?
   - A.
   - B.
   - C.

3. Which formula can you use to find the area of a rectangle?
   - A. area = length x width
   - B. area = \( \frac{1}{2} \) (base x height)
   - C. area = side + side + side + side

2. Using the information from the problem, draw a conclusion about the shape of Mr. Macy’s rug. Mr. Macy’s rug is a
   - A. square
   - B. triangle
   - C. rectangle

4. What is the area of Mr. Macy’s rug?
   - A. 24 ft²
   - B. 12 ft²
   - C. 10 ft²
Learn-to-Solve Word Problems

At HOME

Grade 4-6

WORD PROBLEMS

Learn-to-Solve Word Problems

The table below shows how far Rashad rode his bicycle after school every day for a week. How far did Rashad ride his bike on Tuesday, rounded to the nearest tenth?

**DISTANCE OF BIKE RIDES**

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.348 mi</td>
<td>9.361 mi</td>
<td>3.84 mi</td>
<td>3.498 mi</td>
<td>9.151 mi</td>
</tr>
</tbody>
</table>

1. Without rounding, exactly how far did Rashad ride his bike on Tuesday?
   - A. 2.398 mi
   - B. 2.361 mi
   - C. 3.84 mi

2. Which number is in the tenths place of Rashad’s Tuesday distance?
   - A. 3
   - B. 6
   - C. 1

3. To determine whether to round up or round down in the tenths place, you need to check the
   - A. ones place
   - B. hundredths place
   - C. thousandths place

4. How far did Rashad ride his bike on Tuesday, rounded to the nearest tenth?
   - A. 2.3 mi
   - B. 2.2 mi
   - C. 2.4 mi

Learn-to-Solve Word Problems

Geometry

Selena wants to make a triangular-shaped flag to wave at this weekend’s parade. Her flag design is shown here. How much fabric does Selena need to make her flag?

1. To determine how much fabric is needed for Selena’s flag, she needs to find the
   - A. perimeter
   - B. volume
   - C. area

2. Which formula does Selena need to use?
   - A. length x width
   - B. base x height + 2
   - C. base x height

3. Which dimension on Selena’s flag do you not need to use?
   - A. 8 feet, because it is neither the base nor the height of the triangle
   - B. 6 feet, because it is neither the base nor the height of the triangle
   - C. 4 ft, because it is neither the base nor the height of the triangle

4. How much fabric does Selena need to make her flag?
   - A. 12 ft²
   - B. 24 ft²
   - C. 16 ft²
Learn-to-Solve Word Problems

Woodson’s Bakery sells cookies for $3 each. Diana bought 4 chocolate chip cookies, 5 chocolate striped cookies, and 2 sugar cookies. Her favorite type of cookie is chocolate chip. How much money did Diana spend at Woodson’s Bakery?

1. How many cookies did Diana buy at Woodson’s Bakery?
   - A. 4
   - B. 9
   - C. 11

2. What information will NOT help you solve this problem?
   - A. Cookies cost $2 each.
   - B. Diana’s favorite cookie is chocolate chip.
   - C. Diana only bought 2 sugar cookies.

3. After you know how many total cookies Diana bought, which operation will you use to figure out how much money she spent?
   - A. multiplication
   - B. subtraction
   - C. division

4. How much money did Diana spend at Woodson’s Bakery?
   - A. $11
   - B. $33
   - C. $27

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Learn-to-Solve Word Problems

Mrs. Reed knitted a square blanket for her baby nephew. One side of Mrs. Reed’s blanket measured 3 feet. What is the area of the blanket that Mrs. Reed knitted?

1. Which formula would help you calculate the area of a square?
   - A. side x side
   - B. base x height + 2
   - C. pi x diameter

2. Which of the following diagrams shows the area of the square blanket shaded?
   - A.
   - B.
   - C.

3. What unit would you use for area?
   - A. ft
   - B. ft²
   - C. ft³

4. What is the area of the blanket that Mrs. Reed knitted?
   - A. 8 ft²
   - B. 9 ft²
   - C. 9 ft
Learn-to-Solve Word Problems

Kayla wants to share her bag of jelly beans with her friends, Jasmine and Keon. There are 87 jelly beans in the bag. How many jelly beans will each person get?

1. How many people are sharing the jelly beans?
   - A. 2 – Jasmine and Keon
   - B. 3 – Kayla, Jasmine, and Keon
   - C. 1 – Kayla

2. Which operation will you use to solve this problem?
   - A. addition
   - B. multiplication
   - C. division

3. How many jelly beans will each person get?
   - A. 30
   - B. 29
   - C. 87

4. Which number sentence below could you use to estimate and check to see if your answer is reasonable?
   - A. 90 ÷ 3 = 30
   - B. 87 x 3 = 261
   - C. 100 ÷ 5 = 20

Learn-to-Solve Word Problems

Sunny drew a rectangle that has an area of 32 square feet and a perimeter of 24 feet.

Which of the following rectangles could Sunny have drawn?

<table>
<thead>
<tr>
<th>Rectangle A</th>
<th>Rectangle B</th>
<th>Rectangle C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length = 16 ft, Width = 2 ft</td>
<td>Length = 8 ft, Width = 3 ft</td>
<td>Length = 8 ft, Width = 4 ft</td>
</tr>
</tbody>
</table>

1. Which formula could you use to find the area of a rectangle?
   - A. length – width
   - B. (length + width) x 2
   - C. length x width

2. Which formula could you use to find the perimeter of a rectangle?
   - A. length - width
   - B. (length + width) x 2
   - C. length x width

3. To solve this problem, you should
   - A. calculate the area and perimeter of each rectangle
   - B. calculate the area only of each rectangle
   - C. calculate the perimeter only of each rectangle

4. Which was Sunny's rectangle?
   - A. rectangle A
   - B. rectangle B
   - C. rectangle C
Learn-to-Solve Word Problems

Numbers and Operations

Drew’s family drove to visit his grandmother. On Tuesday, his family drove 342 miles. On Wednesday, they finished the trip by driving another 298 miles. How much farther did Drew’s family drive on Tuesday than on Wednesday?

1. What are important key words in this problem?
   - A. how much farther
   - B. finished the trip
   - C. visit her grandmother

2. What operation will you use to solve this problem?
   - A. addition
   - B. multiplication
   - C. subtraction

3. How much farther did Drew’s family drive on Tuesday than on Wednesday?
   - A. 45 miles
   - B. 164 miles
   - C. 44 miles

4. Which number sentence below could you use to check to see if your answer is correct?
   - A. answer + 298 = 342
   - B. answer + 342 – 298
   - C. answer x 298 = 342

Learn-to-Solve Word Problems

Geometry

The figure below shows the cables behind the computer desk in Trevor’s classroom.

Which cable is perpendicular to Cable 1?

1. Perpendicular lines form angles that measure
   - A. 90°
   - B. 45°
   - C. 180°

2. Which of the following pairs of lines is perpendicular?
   - A. 
   - B. 
   - C. 

3. Which cable is perpendicular to Cable 1?
   - A. cable 3
   - B. cable 2
   - C. cable 4

4. What term describes the relationship between Cable 1 and Cable 4?
   - A. perpendicular
   - B. parallel
   - C. intersecting
Learn-to-Solve Word Problems

Numbers and Operations

Shanna needs to buy 3 loaves of bread and 2 jars of peanut butter at the store. How much money will Shanna spend?

1. How much will 3 loaves of bread cost?
   A. $2.29
   B. $4.58
   C. $6.87

2. How much will 2 jars of peanut butter cost?
   A. $6.98
   B. $3.49
   C. $10.47

3. To find the cost of 3 loaves of bread and 2 jars of peanut butter, you need to
   A. multiply the cost of 3 loaves of bread by the cost of 2 jars of peanut butter
   B. subtract the cost of 3 loaves of bread from the cost of 2 jars of peanut butter
   C. add the cost of 3 loaves of bread and the cost of 2 jars of peanut butter

4. How much money will Shanna spend on 3 loaves of bread and 2 jars of peanut butter?
   A. $11.56
   B. $12.00
   C. $13.85

Learn-to-Solve Word Problems

Geometry

Terri drew the following figures:

Which two figures that Terri drew are similar but not congruent?

1. What does congruent mean?
   A. different
   B. exactly the same
   C. greater than

2. What does similar mean?
   A. exactly the same
   B. less than
   C. same shape, different size

3. Which two figures that Terri drew are similar but not congruent?
   A. figure A and figure B
   B. figure C and figure D
   C. figure A and figure F

4. How do you know that those two figures are similar but not congruent?
   A. They are both equilateral triangles and one is larger than the other.
   B. They are both equilateral triangles and are exactly the same size.
   C. They are different shapes.
Learn-to-Solve Word Problems

Numbers and Operations

Trey is comparing his 2 different water bottles. His green water bottle holds 1.485 liters and his blue water bottle holds 1.35 liters. How much more water does his green water bottle hold?

1. What operation do you need to use to solve this problem?
   ○ A. addition
   ○ B. division
   ○ C. subtraction

3. How should you set up this problem to solve it?
   ○ A. 1.485
     - 1.350
   ○ B. 1.35
     - 1.485
   ○ C. 1.485
     - 1.35

2. What clue words helped you choose an operation?
   ○ A. how much more
   ○ B. water bottle hold
   ○ C. 2 different water bottles

4. How much more water does his green water bottle hold?
   ○ A. 0.135 liters
   ○ B. 1.35 liters
   ○ C. 2.835 liters

Learn-to-Solve Word Problems

Geometry

Reshawn's math teacher asked him to draw a quadrilateral with exactly one pair of parallel sides. What shape should Reshawn draw?

1. How many sides does a quadrilateral have?
   ○ A. 3
   ○ B. 4
   ○ C. 5

3. Which of the following shapes is a quadrilateral with exactly one pair of parallel sides?
   ○ A. 
   ○ B. 
   ○ C. 

2. How many are in a pair?
   ○ A. 2
   ○ B. 1
   ○ C. 4

4. What shape should Reshawn draw?
   ○ A. parallelogram
   ○ B. pentagon
   ○ C. trapezoid
Learn-to-Solve Word Problems

Numbers and Operations

Carl is going to see a movie. He has $15 to spend. If the ticket costs $7.95, which of the following combo meals is he also able to buy?

1. About how much will Carl spend on his movie ticket?
   - A. $8
   - B. $7
   - C. $15

2. About how much money does Carl have left to spend on his combo meal?
   - A. $5
   - B. $8
   - C. $7

3. To solve this problem, it would be best to
   - A. estimate the sum of the items in each combo meal
   - B. add the total cost of all 3 combo meals
   - C. choose the combo meal you would get at the movies

4. Which combo meal is Carl able to buy?
   - A. combo 1
   - B. combo 2
   - C. combo 3

Learn-to-Solve Word Problems

Geometry

Puneet drew the figures shown below. Which one of Puneet’s figures is a polygon?

1. What is a polygon?
   - A. two line segments intersecting at a vertex
   - B. a closed figure with at least three straight sides
   - C. any circular shape

2. Which one of Puneet’s figures is a polygon?
   - A. figure A
   - B. figure B
   - C. figure C

3. Why is Figure A not a polygon?
   - A. It is not closed.
   - B. Not all of the sides are equal lengths.
   - C. It has a curved side.

4. Why is Figure C not a polygon?
   - A. It is not closed.
   - B. Not all of the sides are equal lengths.
   - C. It has a curved side.
Learn-to-Solve Word Problems

Numbers and Operations

Tania had $50. She went to the mall and bought two sweaters. About how much money does Tania have left?

1. About how much money does one sweater cost?
   - A. $15
   - B. $16
   - C. $30

3. To determine how much money Tania has left, you should
   - A. count her money
   - B. add the cost of two sweaters to $50
   - C. subtract the cost of two sweaters from $50

2. About how much money do two sweaters cost?
   - A. $32
   - B. $22
   - C. $50

4. About how much money does Tania have left in savings?
   - A. $22
   - B. $32
   - C. $50

Learn-to-Solve Word Problems

Geometry

Mr. Coburn’s ladder is leaning against his house as shown in the picture. How could you describe the angle the ladder makes with the ground as it leans against the side of the house?

1. Which of the following pictures shows a right angle?
   - A. 
   - B. 
   - C. 

3. An acute angle is
   - A. larger than a right angle
   - B. the same as a right angle
   - C. smaller than a right angle

2. An obtuse angle is
   - A. larger than a right angle
   - B. the same as a right angle
   - C. smaller than a right angle

4. How could you describe the angle the ladder makes with the ground as it leans against the side of the house?
   - A. acute
   - B. obtuse
   - C. right
Learn-to-Solve Word Problems

Numbers and Operations

Allie is 119.62 centimeters tall. Her younger sister, Meredith, is 105.18 centimeters tall. Estimate how much taller Allie is than Meredith.

1. What information will NOT help you solve this problem?
   - A. Allie is 119.62 centimeters tall.
   - B. Meredith is 105.18 centimeters tall.
   - C. Meredith is younger than Allie.

3. Rounded to the nearest whole number, how tall is Meredith?
   - A. 104 cm
   - B. 106 cm
   - C. 105 cm

2. Rounded to the nearest whole number, how tall is Allie?
   - A. 119 cm
   - B. 120 cm
   - C. 121 cm

4. Estimate how much taller Allie is than Meredith.
   - A. 14 cm
   - B. 15 cm
   - C. 18 cm

Learn-to-Solve Word Problems

Geometry

A view of the front of Avi’s house is shown below. Would you classify the triangle that his roof forms from this view as a scalene, isosceles, or equilateral triangle?

1. A scalene triangle has
   - A. 3 sides that are all the same length
   - B. 2 sides that are the same length
   - C. all sides that are different lengths

3. An equilateral triangle has
   - A. 3 sides that are all the same length
   - B. 2 sides that are the same length
   - C. all sides that are different lengths

2. An isosceles triangle has
   - A. 3 sides that are all the same length
   - B. 2 sides that are the same length
   - C. all sides that are different lengths

4. Would you classify the triangle that his roof forms as a scalene, isosceles, or equilateral triangle?
   - A. scalene
   - B. isosceles
   - C. equilateral
Learn-to-Solve Word Problems

Gary went shopping at a bookstore. He bought 3 books that cost $8.95 each. The tax on his total purchase was $1.08. About how much money did Gary spend at the bookstore?

1. Which key word lets you know that you do not need to find an exact answer and should estimate instead?
   - A. spend
   - B. tax
   - C. about

3. Rounded to the nearest dollar, what was the tax on Gary’s purchase?
   - A. $1
   - B. $2
   - C. $1.10

2. Which number sentence shows about how much Gary spent on books, before tax?
   - A. 9+9+9 = $27
   - B. 8+8+8 = $24
   - C. 8.95 x 3 = $26.84

4. About how much money did Gary spend at the bookstore?
   - A. $25
   - B. $27
   - C. $28

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Learn-to-Solve Word Problems

Pasqual drew a picture of a kite, shown here. Beside Pasqual’s kite, Luca drew another picture. Does Luca’s picture of a kite show a translation, rotation, or reflection of Pasqual’s kite?

1. What is a translation?
   - A. A figure turns about a point.
   - B. A figure flips over a line.
   - C. A figure slides in one direction.

3. What is a reflection?
   - A. A figure turns about a point.
   - B. A figure flips over a line.
   - C. A figure slides in one direction.

2. What is a rotation?
   - A. A figure turns about a point.
   - B. A figure flips over a line.
   - C. A figure slides in one direction.

4. Does Luca’s picture of a kite show a translation, a rotation, or a reflection of Pasqual’s kite?
   - A. translation
   - B. rotation
   - C. reflection
Learn-to-Solve Word Problems

Numbers and Operations

Maria is making a necklace. She has 5 green beads, 9 orange beads, 6 blue beads, and 2 purple beads. What fraction of Maria’s beads are not orange?

1. How many beads does Maria have in total?
   - A. 4
   - B. 17
   - C. 13

2. How many of Maria’s beads are not orange?
   - A. 4
   - B. 17
   - C. 13

3. How should you set up the fraction of Maria’s beads that are not orange?
   - A. \( \frac{\text{number of beads that are not orange}}{\text{total number of beads}} \)
   - B. \( \frac{\text{number of beads that are orange}}{\text{total number of beads}} \)
   - C. \( \frac{\text{total number of beads}}{\text{number of beads that are not orange}} \)

4. What fraction of Maria’s beads are not orange?
   - A. \( \frac{9}{17} \)
   - B. \( \frac{17}{19} \)
   - C. \( \frac{13}{17} \)

Learn-to-Solve Word Problems

Geometry

Jillian is making a drawing of a butterfly to give to her mother. She has drawn one wing of the butterfly, as shown below. If Jillian wants the other wing of the butterfly to be a mirror image of the one she’s already drawn, would a translation, rotation, or reflection help her?

1. Which of the following is a key phrase in this problem?
   - A. making a drawing
   - B. mirror image
   - C. to her mother

2. Jillian needs the other wing of her butterfly to
   - A. be the reverse of what she has already drawn
   - B. just slide over to the right
   - C. turn 90 degrees

3. Which of the following figures is Jillian trying to draw?
   - A.
   - B.
   - C.

4. If Jillian wants the other wing of the butterfly to be a mirror image of the one she’s already drawn, would a translation, rotation, or reflection help her?
   - A. translation
   - B. rotation
   - C. reflection
Learn-to-Solve Word Problems

Numbers and Operations

Matt had a tray of cupcakes to share at his birthday party. Matt ate \( \frac{1}{3} \) cupcakes. His friend Julie ate \( \frac{1}{4} \) cupcakes. Who ate more cupcakes?

1. Which diagram represents the amount of cupcakes Julie ate?
   - A. □□□□□□
   - B. □□□□□□
   - C. □□□□□□

2. Which diagram represents the amount of cupcakes that Matt ate?
   - A. □□□□□□
   - B. □□□□□□
   - C. □□□□□□

3. Which of the following strategies would NOT help you determine who ate more?
   - A. Compare the diagrams found in questions 1 and 2.
   - B. Write equivalent fractions with common denominators and compare.
   - C. Remember that mixed numbers are always greater than improper fractions.

4. Who ate more cupcakes?
   - A. Julie
   - B. Matt
   - C. They ate the same amount.

Learn-to-Solve Word Problems

Geometry

Gracie drew the three figures shown below and now wants to name them. Which figure will Gracie name “Ray CP”?

1. A ray has
   - A. two end points
   - B. no beginning or end points
   - C. a beginning point but no end point

2. Which of the following shows a ray of the sun?
   - A. □□□□□□
   - B. □□□□□□
   - C. □□□□□□

3. When naming a ray,
   - A. the first letter must be the beginning point of the ray
   - B. the second letter must be the beginning point of the ray
   - C. the order of the letters doesn’t matter

4. Which figure will Gracie name “Ray CP”?
   - A. figure 1
   - B. figure 2
   - C. figure 3
Learn-to-Solve Word Problems

Numbers and Operations

Rosie surveyed 50 people in her neighborhood to see if they wanted to build a new dog park. Rosie found that 37 people were in favor of the new dog park. What percent of those surveyed were against the new dog park?

1. What fraction of Rosie’s neighbors were in favor of building the new dog park?
   A. \( \frac{37}{50} \)
   B. \( \frac{13}{10} \)
   C. \( \frac{17}{10} \)

3. Which of the following pairs of equivalent fractions helps you determine the percent of Rosie’s neighbors against the new dog park?
   A. \( \frac{21}{100} = \frac{7}{33} \)
   B. \( \frac{56}{100} = \frac{7}{10} \)
   C. \( \frac{17}{100} = \frac{7}{10} \)

2. What fraction of Rosie’s neighbors were against building the new dog park?
   A. \( \frac{3}{10} \)
   B. \( \frac{1}{10} \)
   C. \( \frac{7}{10} \)

4. What percent of those surveyed were against the dog park?
   A. 13%
   B. 37%
   C. 26%

Learn-to-Solve Word Problems

Geometry

Avery is holding a three-dimensional solid with two parallel faces. Which of the following solids is Avery holding?

cone, cylinder, sphere

1. What is a face?
   A. a flat surface of a 3-dimensional figure
   B. a point of a 3-dimensional figure
   C. any polygon

3. Which of the following solids has two parallel faces?
   A. 
   B. 
   C. 

2. For two faces to be parallel, they would
   A. intersect at any angle
   B. intersect at a right angle
   C. never intersect

4. Which of the following solids is Avery holding?
   A. cone
   B. cylinder
   C. sphere
Learn-to-Solve Word Problems

Numbers and Operations

Mr. and Ms. Carlisle took their children Judy, Lexi, Ben, and Laura to a movie for a family fun day. They ordered two bags of popcorn for the whole family to share. What fraction of a bag of popcorn should each family member receive?

1. What operation do you need to use to solve this problem?
   - A. subtraction
   - B. addition
   - C. division

2. How many people are sharing the two bags of popcorn?
   - A. 6 (Mr. and Ms. Carlisle, Judy, Lexi, Ben, and Laura)
   - B. 2 (Mr. and Ms. Carlisle)
   - C. 4 (Judy, Lexi, Ben, and Laura)

3. Which of the following diagrams could help you solve this problem?
   - A. Judy, Lexi, Ben, Laura
   - B. Mr. Carlisle, Ms. Carlisle, Judy, Lexi, Ben, Laura
   - C. Mr. Carlisle, Ms. Carlisle, Judy, Lexi, Ben, Laura

4. What fraction of a bag of popcorn should each family member receive?
   - A. \( \frac{1}{2} \)
   - B. \( \frac{1}{3} \)
   - C. 1 whole

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Learn-to-Solve Word Problems

Geometry

Greg is reading an article about ancient Egypt and sees a picture of a square pyramid. How many faces does a square pyramid have?

1. What shape is the base of the pyramid in the picture that Greg is looking at?
   - A. triangle
   - B. hexagon
   - C. square

2. How many faces extend from the base to the vertex at the top of the pyramid?
   - A. 2
   - B. 3
   - C. 4

3. Is the base of the pyramid also a face?
   - A. no
   - B. yes
   - C. only in triangular pyramids

4. How many faces does a square pyramid have?
   - A. 4
   - B. 5
   - C. 6
Learn-to-Solve Word Problems

Alexandria ran 2/3 of a mile. Caleb ran 5/8 of a mile. Who ran farther, Alexandria or Caleb?

1. One way to compare two fractions is to
   A. write equivalent fractions with a common denominator
   B. add them together
   C. see which one has a greater numerator

3. Which of the following diagrams could help you solve this problem?
   A. Alexandria
   B. Caleb

2. Which of the following represent equivalent fractions?
   A. \( \frac{2}{3} = \frac{4}{6} \) and \( \frac{5}{8} = \frac{10}{16} \)
   B. \( \frac{2}{3} = \frac{4}{6} \) and \( \frac{5}{8} = \frac{10}{16} \)
   C. \( \frac{2}{3} = \frac{4}{6} \) and \( \frac{5}{8} = \frac{10}{16} \)

4. Who ran farther, Alexandria or Caleb?
   A. Caleb
   B. Alexandria
   C. They both ran the same distance.

Learn-to-Solve Word Problems

Peggy drew the picture shown below. How many lines of symmetry does Peggy’s picture have?

1. What is a line of symmetry?
   A. an imaginary line where you could fold the image and both halves would match exactly
   B. the line around the edge of a figure
   C. a real diagonal line drawn from one corner of any figure to the other

2. Which of the following shows an example of a line of symmetry?
   A.
   B.
   C.

3. Which of the following is not a line of symmetry?
   A.
   B.
   C.

4. How many lines of symmetry does Peggy’s picture have?
   A. 1
   B. 4
   C. 2
Learn-to-Solve Word Problems

Lakim wants to buy a CD for $12.99, a book for $7.50, a magnet for $3.49, and a soda for $0.99. He has one ten dollar bill, two five dollar bills, four one dollar bills, three quarters, and one nickel. Does Lakim have enough money to make his purchase?

1. Which of the following would you add to determine how much money Lakim has?
   A. 10.00+5.00+1.00+0.25+0.05
   B. 10+5+5+1+1+1+25+25+25+5
   C. 10.00+5.00+5.00+1.00+1.00+1.00+1.00+0.25+0.25+0.25+0.05

3. How much would the CD, book, magnet, and soda cost Lakim?
   A. $24.80
   B. $24.00
   C. $24.97

2. How much money does Lakim have?
   A. $16.30
   B. $24.80
   C. $104

4. Does Lakim have enough money to make his purchase?
   A. yes
   B. no
   C. He will receive change.

Learn-to-Solve Word Problems

Shatoni drew a picture of a smiley face on a coordinate plane. What coordinates best describe the location of the nose on Shatoni’s smiley face?

1. Look at the x-axis. How far over did Shatoni place the nose?
   A. 2
   B. 3
   C. 5

3. How do you write an ordered pair?
   A. (x,y)
   B. (y,x)
   C. (y,x)

2. Look at the y-axis. How far up did Shatoni place the nose?
   A. 2
   B. 3
   C. 5

4. What coordinates best describe the location of the nose on Shatoni’s smiley face?
   A. (2,3)
   B. (3,3)
   C. (3,2)
Learn-to-Solve Word Problems

Numbers and Operations

Camp Sunshine has 50 campers this summer. Eighteen of the 50 campers are boys. Write a decimal that represents the part of the camp that consists of girls.

1. How many campers at Camp Sunshine are girls?
   - A. 18
   - B. 32
   - C. 50

3. Which of the following fractions with a denominator of 100 is equivalent to the fraction of campers who are girls?
   - A. \(\frac{18}{100}\)
   - B. \(\frac{32}{100}\)
   - C. \(\frac{50}{100}\)

2. What fraction of the campers at Camp Sunshine are girls?
   - A. \(\frac{18}{50}\)
   - B. \(\frac{32}{50}\)
   - C. \(\frac{50}{50}\)

4. Write a decimal that represents the part of the camp that consists of girls.
   - A. 0.18
   - B. 0.32
   - C. 0.64

Learn-to-Solve Word Problems

Algebra

Mr. Diehl showed his 5th grade students the following pattern:

How many dots would be in the sixth figure of Mr. Diehl's pattern?

1. How many dots are in each of the first 4 shapes of Mr. Diehl’s pattern?
   - A. 1, 2, 3, 4
   - B. 1, 3, 9, 12
   - C. 1, 3, 6, 10

3. How would you find the fifth shape in Mr. Diehl’s pattern?
   - A. 10 x 5 = 50
   - B. 10 + 10 = 20
   - C. 10 + 5 = 15

2. Which rule describes the number of dots in each shape of Mr. Diehl’s pattern?
   - A. \(+1 +2 +3 +4\)
   - B. \(+3 +3 +3 +3\)
   - C. \(x1 \times x2 \times x3 \times x4\)

4. How many dots would be in the sixth figure of Mr. Diehl’s pattern?
   - A. 15
   - B. 21
   - C. 25
Learn-to-Solve Word Problems

Noah is planning on making muffins and cake for the school bake sale. He needs \( \frac{1}{2} \) cup flour for his muffin recipe and \( \frac{1}{4} \) cup of flour for his cake recipe. How much flour does Noah need?

1. Which model represents how much flour Noah needs to bake muffins and cake?
   - A. \[ \quad \]
   - B. \[ \quad \]
   - C. \[ \quad \]

3. Which of the following number sentences could you use to solve this problem?
   - A. \( \frac{1}{2} + \frac{1}{4} \)
   - B. \( \frac{1}{2} + \frac{1}{4} \)
   - C. \( \frac{1}{2} + \frac{1}{4} \)

2. What fraction is equivalent to \( \frac{1}{2} \)?
   - A. \( \frac{2}{4} \)
   - B. \( \frac{1}{4} \)
   - C. \( \frac{7}{9} \)

4. How much flour does Noah need?
   - A. \( \frac{3}{8} \) cup
   - B. 1 cup
   - C. \( \frac{7}{8} \) cup

Learn-to-Solve Word Problems

Algebra

Al drew the following pattern:

What would be the ninth figure in Al's pattern?

1. How many figures has Al drawn in his pattern so far?
   - A. 5
   - B. 6
   - C. 9

3. What does Al do to each arrow in his pattern?
   - A. rotates 90° clockwise
   - B. rotates 180° clockwise
   - C. rotates 360° clockwise

2. The question is asking you to find the
   - A. next figure in Al's pattern
   - B. ninth figure in Al's pattern
   - C. tenth figure in Al's pattern

4. What would be the ninth figure in Al's pattern?
   - A. 
   - B. 
   - C.
Learn-to-Solve Word Problems

Numbers and Operations

At field day Julian threw the disc 18 1/2 feet. Quianna threw the disc 19 1/2 feet. How much farther did Quianna throw the disc than Julian?

1. What key words in the problem help you choose an operation?
   - A. threw the disc
   - B. at field day
   - C. how much farther

2. What operation do you need to use to solve this problem?
   - A. subtraction
   - B. addition
   - C. division

3. Which number sentence shows how much farther Quianna threw the disc than Julian?
   - A. 19 1/2 - 18 1/2 = 1 2/2
   - B. 19 1/2 - 18 1/2 = 1 2/2
   - C. 19 1/2 + 18 1/2 = 37 2/2

4. Which shows 2/2 simplified?
   - A. 1
   - B. 1 1/2
   - C. 1 3/2

Learn-to-Solve Word Problems

Algebra

Tessa and Patrick are playing a card game. Tessa created the following number pattern with her set of cards:

She asked her brother Patrick what the eighth number in her pattern will be. What will be the eighth number in Tessa’s pattern?

1. What rule does Tessa’s pattern follow?
   - A. multiply by 3, then add 2
   - B. add 9
   - C. add 8

2. How many numbers are in Tessa’s pattern above?
   - A. 5
   - B. 6
   - C. 8

3. What would be the seventh number in Tessa’s pattern?
   - A. 51
   - B. 53
   - C. 8

4. What is the eighth number in Tessa’s pattern?
   - A. 58
   - B. 60
   - C. 59
Learn-to-Solve Word Problems

1. What operation do you need to use to solve this problem?
   - A. multiplication
   - B. addition
   - C. subtraction

2. Which of the following models could you use to help you solve this problem?
   - A. 
   - B. 
   - C. 

3. Which of the following could you use to solve this problem?
   - A. $4 \frac{1}{2} - 2 \frac{1}{2}$
   - B. $3 \frac{1}{2} - 2 \frac{1}{2}$
   - C. $3 \frac{1}{2} - 2 \frac{1}{2}$

4. How many more miles does Daquan need to ride to reach her cousin’s house?
   - A. $1 \frac{1}{2}$
   - B. $2 \frac{1}{2}$
   - C. $3 \frac{1}{2}$

Learn-to-Solve Word Problems

Gino’s number machine is shown here. Gino inputs one number and his number machine uses the same rule every time to find the output. What rule does Gino’s number machine use?

<table>
<thead>
<tr>
<th>Gino’s Number Machine</th>
</tr>
</thead>
<tbody>
<tr>
<td>input</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>7</td>
</tr>
</tbody>
</table>

1. What rules could Gino’s number machine have used when he input 2 and received an output of 6?
   - A. add 2 or multiply by 3
   - B. add 4 or multiply by 3
   - C. add 3 or multiply by 3

2. What rules could Gino’s number machine have used when he input 7 and received an output of 21?
   - A. add 14 or multiply by 3
   - B. add 3 or multiply by 14
   - C. add 7 or multiply by 7

3. To solve this problem, it is important to
   - A. choose the rule that works every time
   - B. choose the rule that works only the first time
   - C. choose a rule that does not work

4. What rule did Gino’s number machine use?
   - A. add 4
   - B. multiply by 3
   - C. add 14
Learn-to-Solve Word Problems

Numbers and Operations

Kevin, Danny, and Sarah all take piano lessons. Yesterday Kevin practiced for \( \frac{1}{2} \) hour, Danny practiced for \( \frac{1}{3} \) hour, and Sarah practiced for \( \frac{2}{3} \) hour. How much time did the three piano students practice in all?

1. What operation do you need to use to solve this problem?
   - A. subtraction
   - B. addition
   - C. division

2. Before you can add \( \frac{1}{2} \), \( \frac{1}{3} \), and \( \frac{2}{3} \), you need to
   - A. find a common denominator
   - B. eliminate the smallest fraction
   - C. find a common factor

3. Which of the following will help you solve this problem?
   - A. \( \frac{1}{2} + \frac{1}{3} + \frac{2}{3} \)
   - B. \( \frac{1}{2} + \frac{1}{3} + \frac{4}{6} \)
   - C. \( \frac{1}{2} + \frac{2}{3} + \frac{2}{6} \)

4. How much time did the three piano students practice in all?
   - A. \( \frac{38}{6} \) hours
   - B. \( 2 \frac{1}{2} \) hours
   - C. \( 2 \frac{3}{6} \) hours

Learn-to-Solve Word Problems

Algebra

Which of the following scenarios could not be represented by a negative integer?

Scenario 1: The town of Okia is 203 feet below sea level.
Scenario 2: Mary owes $42 to her aunt.
Scenario 3: The plant grew 17 inches.

1. A negative integer
   - A. represents a value less than 0
   - B. represents a value greater than 0
   - C. represents a value equal to 0

2. Which of the following is a key word in this problem?
   - A. Mary
   - B. Okia
   - C. not

3. Which of the following scenarios could not be represented by a negative integer?
   - A. scenario 1
   - B. scenario 2
   - C. scenario 3

4. How could you represent Scenario 3?
   - A. negative 17
   - B. positive 17
   - C. positive 42
Learn-to-Solve Word Problems

Ms. Price bought 4 1/2 pounds of coffee to share with her coworkers. She wants to give each coworker 1/3 pound. How many coworkers will receive coffee from Ms. Price?

1. What operation do you need to use to solve this problem?
   ○ A. subtraction
   ○ B. addition
   ○ C. division

3. Which of the following diagrams could help you solve this problem?
   ○ A. 
   ○ B. 
   ○ C. 

2. Which of the following could you use to solve this problem?
   ○ A. $4 1/2 \times 1/3$
   ○ B. $4 1/2 \div 1/3$
   ○ C. $4 1/2 \div 4$

4. How many coworkers will receive coffee from Ms. Price?
   ○ A. 4
   ○ B. 18
   ○ C. 20

Learn-to-Solve Word Problems

There are 50 people in a movie theater. If 4 groups of 6 people leave the movie theater, how many people are left in the theater?

1. How many people left the theater?
   ○ A. 4
   ○ B. 6
   ○ C. 24

3. Using order of operations, which part of the number sentence $(50 - 4 \times 6)$ do you need to solve first?
   ○ A. $4 \times 6$
   ○ B. $50 - 4$
   ○ C. $6 + 50$

2. Which of the following could you use to solve the word problem above?
   ○ A. $4 \times 6 + 50$
   ○ B. $50 - 4 \times 6$
   ○ C. $(50 - 4) \times 6$

4. How many people are left in the theater?
   ○ A. 28
   ○ B. 26
   ○ C. 24
Learn-to-Solve Word Problems

**Measurement**

Todd needs to measure several distances using customary units of measurement. Which of the following distances should he choose to measure in feet?

1. A foot is about
   - A. the length of a bed
   - B. the length of a pencil eraser
   - C. the length of a sheet of loose-leaf paper

2. To measure a distance that is smaller than a foot, it is best to use:
   - A. a unit smaller than a foot
   - B. the unit "feet"
   - C. a unit that is larger than a foot

3. You would mostly likely choose to measure a distance in feet if
   - A. it is longer than a foot, but shorter than a mile
   - B. it is shorter than a foot
   - C. it is longer than a mile

4. Which of the following should Todd choose to measure in feet?
   - A. the length of his pinky finger
   - B. the distance from New York City to Washington, DC
   - C. the height of a doorway

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Learn-to-Solve Word Problems

**Algebra**

Kimba is 8 years younger than Jason. Which of the following expressions represents Kimba’s age?

- $x - 8$
- $x + 8$
- $8x$

1. In this problem, the variable "x" represents
   - A. Kimba’s age
   - B. Jason’s age
   - C. your age

2. To show that Kimba is 8 years younger than Jason, you would need to
   - A. subtract 8 from Jason’s age
   - B. add 8 to Jason’s age
   - C. multiply Jason’s age by 8

3. Which of the following expressions represents Kimba’s age?
   - A. $x + 8$
   - B. $x - 8$
   - C. $8x$

4. If Jason is 19 years old, how old would Kimba be?
   - A. 27
   - B. 19
   - C. 11
Learn-to-Solve Word Problems

Measurement

Jose is buying 3 apples at the grocery store. Which of the following would be a reasonable estimate of the weight of 3 apples?

2 ounces
1.5 pounds
15 pounds

1. An ounce is
   - A. less than a pound
   - B. greater than a pound
   - C. equal to a pound

3. Which of the following weighs about 1 pound?
   - A. 5 paper clips
   - B. 80 quarters
   - C. 10 bricks

2. Which of the following weighs about 1 ounce?
   - A. 1 paper clip
   - B. 5 pencils
   - C. 2 bricks

4. Thinking about what you know about ounces and pounds, which of the following would be a reasonable estimate of the weight of 3 apples?
   - A. 2 ounces
   - B. 1.5 pounds
   - C. 15 pounds

Learn-to-Solve Word Problems

Algebra

Holly watched TV for 35 minutes in the morning. She watched more TV in the afternoon. By the end of the day, Holly had watched a total of 83 minutes of TV. Which equation could you use to determine how much TV Holly watched in the afternoon?

35 + x 83 + 35 = x 35 + x = 83

1. An equation must have an
   - A. plus sign
   - B. equal sign
   - C. letter x

3. Which equation could you use to determine how much TV Holly watched in the afternoon?
   - A. 35 + x
   - B. 83 + 35 = x
   - C. 35 + x = 83

2. In this problem, the variable x represents
   - A. the number of minutes that Holly watched TV in the morning
   - B. the number of minutes that Holly watched TV in the afternoon
   - C. the number of minutes that Holly watched TV all day

4. What is the solution to the equation?
   - A. 83 minutes
   - B. 118 minutes
   - C. 48 minutes
Learn-to-Solve Word Problems

Measurement

Krista, Leah, and Paden each bought a bag of candy at the candy store. Krista’s bag weighed 1 pound and 3 ounces. Leah’s bag weighed 19 ounces. Paden’s bag weighed 1 pound and 4 ounces.

Whose bag of candy weighed the most?

1. How many ounces are in 1 pound?
   A. 8
   B. 16
   C. 12

2. To compare the weights of the three candy bags, you should change all weights to
   A. ounces
   B. grams
   C. tons

3. Which of the following statements is not correct?
   A. 1 pound and 3 ounces = 19 ounces
   B. 1 pound and 4 ounces = 20 ounces
   C. 1 pound and 3 ounces = 15 ounces

4. Whose bag of candy weighed the most?
   A. Krista’s
   B. Leah’s
   C. Paden’s

Data, Statistics, and Probability

Janie has a bag of candy with the following pieces inside:

Janie reaches her hand into the bag to take one piece of candy without looking. What describes the chance that she will choose a red piece?

A. unlikely
   B. equally likely
   C. impossible

1. How many pieces of candy in the bag are red?
   A. 2
   B. 5
   C. 7

2. How many pieces of candy are NOT red?
   A. 2
   B. 5
   C. 7

3. Which statement about the candy in Janie’s bag is true?
   A. More pieces are NOT red.
   B. More pieces are red.
   C. Neither of the above statements is true.

4. Janie reaches her hand into the bag to take one piece of candy without looking. What describes the chance that she will choose a red piece?
   A. unlikely
   B. equally likely
   C. likely
Learn-to-Solve Word Problems

**Measurement**

Joyanna opened a new bottle of syrup to pour on her pancakes. The bottle contains 1.2 liters of syrup. How many milliliters are in Joyanna’s bottle of syrup?

1. In 1 liter, there are
   - A. 1,000,000 milliliters
   - B. 100 milliliters
   - C. 1,000 milliliters

2. In 0.2 liters, there are
   - A. 2,000 milliliters
   - B. 200 milliliters
   - C. 20 milliliters

3. How many milliliters are in Joyanna’s bottle of syrup?
   - A. 1,200
   - B. 1,200,000
   - C. 12,000

4. To check your answer you could
   - A. multiply 1.2 by 1,000 since 1 L = 1,000 mL
   - B. divide 1.2 by 1,000 since 1 L = 1,000 mL
   - C. add 1.2 and 1,000 since a milliliter is larger than a liter

---

Learn-to-Solve Word Problems

**Data, Statistics, and Probability**

At the school picnic, there is a raffle. The following prizes are being raffled off:

Oscar wins one of the raffle prizes. Which best describes the chance that he won a jacket?

- A. impossible
- B. likely, but not certain
- C. unlikely, but not impossible

1. How many raffle prizes are there in total?
   - A. 5
   - B. 50
   - C. 95

2. How many of the raffle prizes are jackets?
   - A. 5
   - B. 50
   - C. 95

3. Is it possible that Oscar could have won one of the jackets?
   - A. no
   - B. yes
   - C. only if it came in his size

4. Which best describes the chance that Oscar won a jacket?
   - A. impossible
   - B. likely, but not certain
   - C. unlikely, but not impossible
Learn-to-Solve Word Problems

Ms. Hegedus, Ms. Ragland, and Mr. Brack all brought in juice for the class holiday party. Who brought the most punch to the party?

Ms. Hegedus  Ms. Ragland  Mr. Brack
2 gallons  17 pints  33 cups

1. To compare the three amounts shown above, you could
   ○ A. mix up the units on all amounts
   ○ B. convert all amounts to the same unit: liters
   ○ C. convert all amounts to the same unit: cups

2. 2 gallons is equal to
   ○ A. 32 cups because there are 16 cups in 1 gallon
   ○ B. 16 cups because there are 8 cups in 1 gallon
   ○ C. 64 cups because there are 32 cups in 1 gallon

3. 17 pints is equal to
   ○ A. 34 cups because there are 2 cups in 1 pint
   ○ B. 17 cups because there is 1 cup in 1 pint
   ○ C. 68 cups because there are 4 cups in 1 pint

4. Who brought the most juice to the party?
   ○ A. Ms. Hegedus
   ○ B. Ms. Ragland
   ○ C. Mr. Brack

---

Learn-to-Solve Word Problems

Juacquin is playing a game using the spinner pictured. What is the probability that Juacquin’s spinner will land on a number greater than 3?

1. Which list below represents the numbers on the spinner that are greater than 3?
   ○ A. 3, 4, 5, 6, 7, 8
   ○ B. 4, 5, 6, 7, 8
   ○ C. 4, 5, 6, 8

2. How many numbers are on the spinner in total?
   ○ A. 5
   ○ B. 3
   ○ C. 8

3. Which of the following represents how you would write the probability of the spinner landing on a number greater than 3 as a fraction?
   ○ A. Number of spaces greater than 3
       Total number of spaces
   ○ B. Number of spaces less than 3
       Total number of spaces
   ○ C. Total number of spaces
       Number of spaces greater than 3

4. What is the probability that Juacquin’s spinner will land on a number greater than 3?
   ○ A. $\frac{3}{5}$
   ○ B. $\frac{3}{8}$
   ○ C. $\frac{5}{8}$
Learn-to-Solve Word Problems

Measurement

Sonia and Harry are building a snowman in their front yard in Silver Spring, Maryland. Which of the following temperatures could not reasonably describe the temperature outside in Silver Spring, Maryland?

- 29°F
- -1°C
- 28°C

1. For children to be outside building a snowman, the temperature would need to be
   A. close to boiling
   B. neither too hot nor too cold
   C. close to freezing

3. On the Fahrenheit scale, freezing is
   A. 32°F
   B. 0°F
   C. 55°F

2. On the Celsius scale, freezing is
   A. 32°C
   B. 0°C
   C. 15°C

4. Which of the following temperatures could not reasonably describe the temperature outside in Silver Spring, MD?
   A. 29°F
   B. -1°C
   C. 28°C

Learn-to-Solve Word Problems

Data, Statistics, and Probability

A bag contains numbered discs that are each the same shape and size as shown. What is the probability that Miriam will pull out a disc with a number ending in 2 or 8?

\[
\frac{1}{3} \quad \frac{2}{3} \quad \frac{3}{15}
\]

1. How many total discs are in the bag?
   A. 16
   B. 10
   C. 15

3. Which of the following shows the probability of Miriam pulling out a disc with a number ending in 2 or 8?
   A. \( \frac{1}{16} \)
   B. \( \frac{5}{10} \)
   C. \( \frac{1}{8} \)

2. How many discs end in “2” or “8”?
   A. 5
   B. 3
   C. 2

4. Now, remember to simplify your answer. Which of the following shows the probability of Miriam pulling out a disc with a number ending in 2 or 8?
   A. \( \frac{1}{2} \)
   B. \( \frac{2}{3} \)
   C. \( \frac{1}{8} \)
Learn-to-Solve Word Problems

Jasmine loves to play with her toy dollhouse. The fork in her dollhouse is shown below. Which of the following is a reasonable estimate for the length of the toy fork shown below?

1 cm 6 cm 16 cm

1. To estimate a length measurement, you should
   - A. use a scale to be precise
   - B. use a ruler to find the exact length
   - C. choose a distance that makes the most sense without using a ruler

2. Which word below is not a key word in this problem?
   - A. play
   - B. length
   - C. estimate

3. A centimeter is about
   - A. the length of your foot
   - B. the width of your pinky
   - C. the size of one grain of sand

4. Which is a reasonable estimate for the length of the toy fork?
   - A. 1 cm
   - B. 6 cm
   - C. 16 cm

---

Learn-to-Solve Word Problems

Caitlyn measured how much snow fell each day in Macedonia, Ohio, for one week. She recorded her results on the table below. What was the median snowfall amount that week?

<table>
<thead>
<tr>
<th>Day</th>
<th>Snowfall (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunday</td>
<td>5 in</td>
</tr>
<tr>
<td>Monday</td>
<td>3 in</td>
</tr>
<tr>
<td>Tuesday</td>
<td>1 in</td>
</tr>
<tr>
<td>Wednesday</td>
<td>8 in</td>
</tr>
<tr>
<td>Thursday</td>
<td>1 in</td>
</tr>
<tr>
<td>Friday</td>
<td>2 in</td>
</tr>
<tr>
<td>Saturday</td>
<td>4 in</td>
</tr>
</tbody>
</table>

1. The median of a set of data is the
   - A. greatest value
   - B. middle value
   - C. value that occurs most often

2. What would be most helpful in finding the median of this set of data?
   - A. listing the numbers in order from least to greatest
   - B. leaving the numbers in the order they are in
   - C. mixing up all of the numbers

3. Do you need to list the number 1 (for Tuesday and Thursday) twice in your list of data?
   - A. Yes, each 1 represents a different piece of data.
   - B. No, you should only count the first 1.
   - C. You can choose if you want to or not.

4. What was the median snowfall amount this week?
   - A. 1 in
   - B. 5 in
   - C. 3 in
Learn-to-Solve Word Problems

Ms. DeMarco bought 2 gallons of punch for her niece’s birthday party. How many quarts of punch did Ms. DeMarco buy?

1. Which of the following statements is true?
   A. A gallon is greater than a quart.
   B. A gallon is less than a quart.
   C. A gallon and a quart are equal.

2. How many quarts are in one gallon?
   A. 2
   B. 4
   C. 8

3. Which trick might help you remember the measurement fact for how many quarts are in a gallon?
   A. There are 4 quarters in a dollar, so “quart” means “fourth.”
   B. There are twenty nickels in a dollar, so “quart” means “twenty-fourth.”
   C. There are 3 periods in a hockey game, so “quart” means “third.”

4. How many quarts of punch did Ms. DeMarco buy?
   A. 4 quarts
   B. 8 quarts
   C. 12 quarts

Learn-to-Solve Word Problems

Mr. Forringer gave a spelling test and his students earned the following scores:

100 89 78 83 98 72 83 89 72 95 83 100

What is the mode of the scores on Mr. Forringer’s spelling test?

1. The mode of a set of data is the
   A. greatest value
   B. middle value
   C. value that occurs most often

2. Is it possible to have more than one mode in a set of data?
   A. no
   B. yes
   C. only if there are fewer than 5 numbers in the data set

3. Find the mode(s) of the scores on Mr. Forringer’s spelling test.
   A. 83, 89, and 100
   B. 83 and 89
   C. 89

4. Why is 100 not one of the modes of this set of data?
   A. 100 occurs only two times; 83 and 89 occur three times
   B. 100 is the greatest number
   C. the mode has to be near the middle value
Learn-to-Solve Word Problems

Ms. Dube’s new baby weighs 7 pounds and 12 ounces. How many ounces does Ms. Dube’s new baby weigh?

1. How many ounces are in 1 pound?
   - A. 8
   - B. 12
   - C. 16

3. To find out the weight of Ms. Dube’s baby in ounces you should
   - A. subtract 12 from the number of ounces in 7 pounds
   - B. add 12 to the number of ounces in 7 pounds
   - C. multiply 12 and the number of ounces in 7 pounds

2. Which number sentence shows how to find the number of ounces in 7 pounds?
   - A. $7 \times 16 = 112$
   - B. $7 + 16 = 23$
   - C. $16 \div 7 = 2 R 2$

4. How many ounces does Ms. Dube’s new baby weigh?
   - A. 124
   - B. 112
   - C. 19

Learn-to-Solve Word Problems

The table below shows the number of points that the Tigers scored in each of their first eight basketball games of the season. What is the range of the Tigers’ points?

<table>
<thead>
<tr>
<th>Game 1</th>
<th>Game 2</th>
<th>Game 3</th>
<th>Game 4</th>
<th>Game 5</th>
<th>Game 6</th>
<th>Game 7</th>
<th>Game 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>42</td>
<td>29</td>
<td>36</td>
<td>44</td>
<td>32</td>
<td>38</td>
<td>40</td>
<td>36</td>
</tr>
</tbody>
</table>

1. The range of a set of data shows the
   - A. spread of the data
   - B. middle value
   - C. value that occurs most often

3. Which of the following would you use to calculate the range of this data set?
   - A. $44 - 29$
   - B. $36 \times 2$
   - C. $42 - 36$

2. To calculate the range of a set of data you need to
   - A. identify the value that occurs more than once
   - B. add all of the numbers together and divide by 8
   - C. subtract the smallest value from the greatest value

4. What is the range of the Tigers’ points?
   - A. 15
   - B. 36
   - C. 6
Learn-to-Solve Word Problems

**Measurement**

In the long jump, Keon jumped 2 yards and 2 feet. How many inches did Keon jump?

1. How many feet are in 1 yard?
   - A. 12
   - B. 3
   - C. 36

2. How many feet did Keon jump in total?
   - A. 8
   - B. 2
   - C. 6

3. How many inches are in 1 foot?
   - A. 12
   - B. 3
   - C. 36

4. How many inches did Keon jump?
   - A. 72
   - B. 24
   - C. 96

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Learn-to-Solve Word Problems

**Data, Statistics, and Probability**

Jacori took a survey of 5th graders to find out their favorite sports and graphed his results in the bar graph below. How many more students chose basketball as their favorite sport over swimming?

1. How many students chose basketball as their favorite sport?
   - A. 3
   - B. 8
   - C. 11

2. How many students chose swimming as their favorite sport?
   - A. 3
   - B. 11
   - C. 5

3. To find out how many more students chose basketball over swimming, you should
   - A. subtract the number of students who chose swimming from the number of students who chose basketball
   - B. add the number of students who chose swimming
   - C. find the most popular sport

4. How many more students chose basketball as their favorite sport over swimming?
   - A. 3
   - B. 5
   - C. 8
Learn-to-Solve Word Problems

The Kovaleski family drove 64 miles to visit an amusement park. How many yards did the Kovaleski family drive?

1. How many feet are in 1 mile?
   - A. 1,000
   - B. 1,760
   - C. 5,280

2. How many feet are in 1 yard?
   - A. 36
   - B. 3
   - C. 12

3. Which number sentence shows how many yards are in 1 mile?
   - A. 5,280 ÷ 3 = 1,760
   - B. 5,280 x 3 = 15,840
   - C. 5,280 + 3 = 5,283

4. How many yards did the Kovaleski family drive?
   - A. 1,824
   - B. 112,640
   - C. 1,760

Learn-to-Solve Word Problems

The stem-and-leaf plot shows how many cans of food each girl in one club donated to a food drive. Which of the following statements about the stem-and-leaf plot is not true?

Statement 1: 11 girls donated food
Statement 2: 2 girls donated 13 cans
Statement 3: 2 girls donated 5 cans

1. To determine how many girls donated food, you should
   - A. count the stems only
   - B. count the leaves only
   - C. count the stems and the leaves

2. How is the number “13” represented on the stem-and-leaf plot?
   - A. its stem is “1” and its leaf is “3”
   - B. its stem is “3” and its leaf is “1”
   - C. its stem is “1” and its leaf is “3”

3. What values do the “5”s that you see on the stem-and-leaf plot represent?
   - A. 55 and 55
   - B. 25 and 45
   - C. 5

4. Which statement about the stem-and-leaf plot is not true?
   - A. statement 1
   - B. statement 2
   - C. statement 3
Learn-to-Solve Word Problems

Measurement

Tanner measured her notebook and found that it was 26 centimeters long. How many millimeters long is Tanner’s notebook?

1. Which of the following statements is true?
   A. A millimeter is less than a centimeter.
   B. A millimeter is greater than a centimeter.
   C. A millimeter is equal to a centimeter.

2. Which measurement fact is true?
   A. 10 mm = 100 cm
   B. 1 cm = 100 mm
   C. 1 cm = 10 mm

3. To determine how many millimeters are in 26 centimeters, you should
   A. divide 26 by 10
   B. divide 10 by 26
   C. multiply 26 by 10

4. How many millimeters long is Tanner’s notebook?
   A. 2.6 millimeters
   B. 260 millimeters
   C. 2,600 millimeters

Learn-to-Solve Word Problems

Data, Statistics, and Probability

The line graph shows the number of visitors to a garden show over the course of one week. What term best describes the trend that this line graph shows?

Decrease  Increase  Maintain

1. Line graphs show
   A. percents of those surveyed who made different choices
   B. different categories of data
   C. how data changes over time

2. What does decrease mean?
   A. goes up
   B. goes down
   C. stays the same

3. What does increase mean?
   A. goes up
   B. goes down
   C. stays the same

4. What term best describes the trend that this line graph shows?
   A. decrease
   B. increase
   C. maintain
Learn-to-Solve Word Problems

Measurement

In one week, James swam 3,100 meters during his swim team practices. How many kilometers did James swim in one week?

1. Which of the following statements is true?
   - A. A meter is less than a kilometer
   - B. A meter is greater than a kilometer
   - C. A meter is equal to a kilometer

3. To determine how many kilometers 3,100 meters is, you should
   - A. divide 3,100 by 1,000
   - B. divide 1,000 by 3,100
   - C. multiply 3,100 by 1,000

2. Which measurement fact is true?
   - A. 100 m = 1 km
   - B. 1,000 m = 1 km
   - C. 1 m = 1,000 km

4. How many kilometers did James swim in one week?
   - A. 0.31
   - B. 31,000
   - C. 3.1

Learn-to-Solve Word Problems

Data, Statistics, and Probability

The circle graph below shows the favorite ice cream flavors of Ms. Krowitz’s 6th grade students. Which data set is represented by Ms. Krowitz’s circle graph?

1. What fraction of the circle graph represents chocolate?
   - A. \( \frac{1}{4} \)
   - B. \( \frac{1}{2} \)
   - C. \( \frac{2}{5} \)

2. Examine each data set. What is the total number of students in each data set?
   - A. 12
   - B. 18
   - C. 24

3. What is \( \frac{1}{2} \) of 24?
   - A. 12
   - B. 18
   - C. 10

4. Which data set is represented by Ms. Krowitz’s circle graph?
   - A. data set 1
   - B. data set 2
   - C. data set 3
Learn-to-Solve Word Problems

Kelvin’s new puppy weighs 2.3 kilograms. How many grams does Kelvin’s new puppy weigh?

1. How many grams are in 1 kilogram?
   - A. 10
   - B. 100
   - C. 1,000

3. Which of the following could you use to determine how many grams are in 2.3 kilograms?
   - A. 1,000 + 2.3
   - B. 2.3 x 1,000
   - C. 2.3 + 1,000

2. What operation should you use to convert kilograms to grams?
   - A. multiplication
   - B. division
   - C. addition

4. How many grams does Kelvin’s new puppy weigh?
   - A. 1,002.3
   - B. 2,300
   - C. 0.0023

Learn-to-Solve Word Problems

Julia is making a sandwich for lunch. She will choose one bread, one meat, and one cheese from the options listed below. How many different combinations are possible for Julia?

<table>
<thead>
<tr>
<th>Bread</th>
<th>Meat</th>
</tr>
</thead>
<tbody>
<tr>
<td>rye</td>
<td>ham</td>
</tr>
<tr>
<td>wheat</td>
<td>turkey</td>
</tr>
<tr>
<td></td>
<td>chicken</td>
</tr>
</tbody>
</table>

1. Which of the following is not a possible combination for Julia’s sandwich?
   - A. rye bread, ham, and turkey
   - B. rye bread, ham, and Swiss cheese
   - C. wheat bread, turkey, and cheddar cheese

2. To find the number of total possible combinations, you could
   - A. multiply the number of possibilities in each category together
   - B. add the number of possibilities in each category together
   - C. subtract the number of possibilities from the number of meat choices

3. How many different combinations are possible for Julia?
   - A. 24
   - B. 7
   - C. 12

4. Which of the following would help you check your answer?
   - A. write a ratio
   - B. make a tree diagram
   - C. make a bar graph
Learn-to-Solve Word Problems

Measurement

In history class, Shatil is learning about a war that took place four centuries and three decades ago. How many years ago did that war occur?

1. How many years are in 1 century?
   A. 10
   B. 100
   C. 1,000

3. Which of the following could you use to determine how many years are in four centuries and three decades?
   A. 400 + 30
   B. 4,000 + 300
   C. 400 + 30

2. How many years are in 1 decade?
   A. 10
   B. 100
   C. 1,000

4. How many years ago did the war occur?
   A. 430
   B. 4,300
   C. 43

Learn-to-Solve Word Problems

Data, Statistics, and Probability

Janice has the following sweaters in her closet: As a fraction, what is the ratio of Janice’s striped sweaters to starred sweaters?

1. How many striped sweaters does Janice have?
   A. 3
   B. 4
   C. 9

3. How would you write the ratio of Janice’s striped sweaters to starred sweaters?
   A. Number of striped sweaters
   B. Number of total sweaters
   C. Number of total sweaters

2. How many starred sweaters does Janice have?
   A. 3
   B. 4
   C. 9

4. As a fraction, what is the ratio of Janice’s striped sweaters to starred sweaters?
   A. $\frac{3}{4}$
   B. $\frac{3}{5}$
   C. $\frac{4}{5}$
Learn-to-Solve Word Problems

Measurement

Juanita left home to visit her aunt at 8:30am. She returned home later that day at 4:15pm. How long was Juanita away from her home to visit her aunt?

1. How much time was Juanita away from her home in the morning (until 12 noon)?
   - A. 4 hours, 30 minutes
   - B. 3 hours, 30 minutes
   - C. 2 hours, 30 minutes

3. Which number sentence below would help you determine how much time Juanita was away from home?
   - A. 3 hours, 30 minutes + 4 hours, 15 minutes
   - B. 4 hours, 15 minutes – 3 hours, 30 minutes
   - C. 3 hours, 30 minutes x 4 hours, 15 minutes

2. How much time was Juanita away from her home in the afternoon (past 12 noon)?
   - A. 4 hours, 15 minutes
   - B. 8 hours, 30 minutes
   - C. 3 hours, 30 minutes

4. How long was Juanita away from her home to visit her aunt?
   - A. 8 hours, 45 minutes
   - B. 7 hours, 15 minutes
   - C. 7 hours, 45 minutes

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Learn-to-Solve Word Problems

Data, Statistics, and Probability

The table below shows how many girls and boys are in each class at Walker Elementary School. What is the ratio of 4th grade girls to all students at Walker Elementary School?

<table>
<thead>
<tr>
<th></th>
<th>GIRLS</th>
<th>BOYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Grade</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>4th Grade</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>5th Grade</td>
<td>11</td>
<td>14</td>
</tr>
</tbody>
</table>

1. How many 4th grade girls are there?
   - A. 17
   - B. 12
   - C. 32

3. How many students go to Walker Elementary School?
   - A. 82
   - B. 65
   - C. 40

2. How would you find “all students” at Walker Elementary School?
   - A. add up all of the girls in all classes
   - B. add up all of the girls and boys in all classes
   - C. add up all of the numbers except 4th grade girls

4. What is the ratio of 4th grade girls to all students at Walker Elementary School?
   - A. 17:40
   - B. 82:17
   - C. 17:82