1 In the figure below, $\overrightarrow{AB}$ intersects $\overrightarrow{BD}$, $\overrightarrow{BE}$, and $\overrightarrow{CE}$.
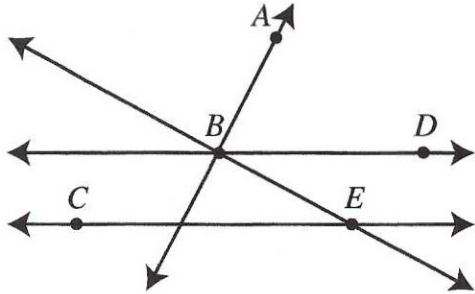
Which two rays intersect to form ∠ABD ?

A $\overrightarrow{EC}$ and $\overrightarrow{BE}$

B $\overrightarrow{BD}$ and $\overrightarrow{EC}$

C $\overrightarrow{EB}$ and $\overrightarrow{AB}$

D $\overrightarrow{BA}$ and $\overrightarrow{BD}$

2 Which stem-and-leaf plot represents the numbers 34, 37, 32, and 39 ?

A

| 3 | 2 4 7 9 |

| **Key** |
| 3 \| 0 = 30 |

B

| 30 | 2 4 7 9 |

| **Key** |
| 3 \| 0 = 30 |

C

| 3 | 92 47 |

| **Key** |
| 3 \| 0 = 30 |

D

| 2479 | 3 |

| **Key** |
| 3 \| 0 = 30 |
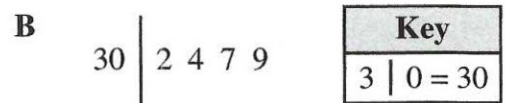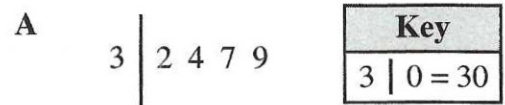
3 Mario had 20 packages of building blocks. Each package contained 12 blocks. He gave 2 packages of the blocks to his cousin. What is the total number of **blocks** Mario had left?

A   18 blocks
B   30 blocks
C   216 blocks
D   360 blocks

Go On

4 Kelly created a pattern using the rule "add 9 to get the next number." The first four numbers in her pattern are shown below.

19, 28, 37, 46, __ , __

What should be the **sixth** number in Kelly's pattern?

A 65
B 64
C 56
D 55

5 Dominic cut a piece of rope into 4 pieces. The lengths of the 4 pieces of rope are described below.

- The length of the first piece was 0.48 meter.

- The length of the second piece was 0.06 meter.

- The length of the third piece was 0.78 meter.

- The length of the fourth piece was between the lengths of the first piece and the third piece.

There was no rope left over after it was cut into 4 pieces. Which is the **best** ESTIMATE of the length of Dominic's rope before it was cut?
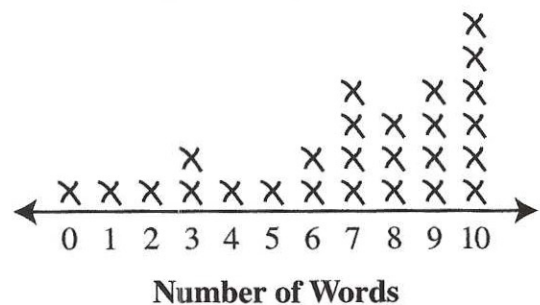
A less than 1.35 meters
B between 1.35 meters and 1.75 meters
C between 1.76 meters and 2.15 meters
D greater than 2.15 meters

6 What is the value of the digit 8 in the number 6,890,451 ?

A 8 hundred thousands
B 8 hundreds
C 8 millions
D 8 ten thousands

7 The line plot below shows the number of words spelled correctly by each student in Mr. Montalvo's class on a spelling quiz.

Number of Words Spelled Correctly by Each Student

```
                                    X
                                    X
                  X       X  X
                  X  X  X  X
            X        X  X  X  X
    X  X  X  X  X  X  X  X  X  X  X
  <---------------------------------->
    0  1  2  3  4  5  6  7  8  9  10
```
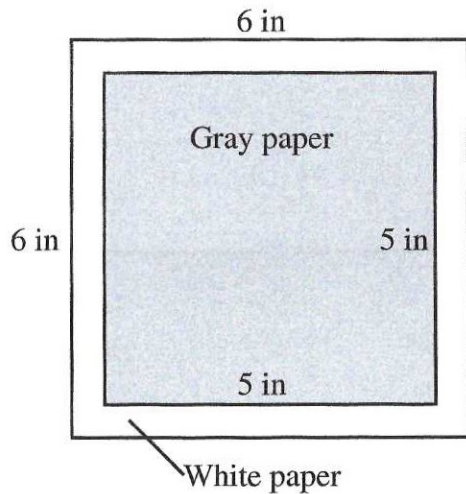
Number of Words

Key
X = 1 student

How many **more** students spelled exactly 10 words correctly than spelled exactly 3 words correctly?

A 2 students
B 4 students
C 6 students
D 7 students

Go On ⇒

8 Mattie is making a poster using the two different sizes of square paper shown below.

6 in

Gray paper

6 in   5 in

5 in

White paper

Which word **best** describes the relationship between the gray piece of paper and the white piece of paper?

A acute

B congruent

C obtuse

D similar

9 Francine is 5 inches taller than her brother Harold. If the letter *h* represents Harold's height, which expression could be used to determine Francine's height?

A $h + 5$

B $h - 5$

C $h \times 5$

D $h \div 5$

Go On

Write your answer to Question 10 on a separate sheet of paper. Be sure to answer
Parts A and B.

10 Mr. Mack needs to order 72 balloons for his company's picnic. He plans to order 12 different colors of balloons. He wants the same number of each color balloon.

    A How many balloons of each color should Mr. Mack order? Show or explain how you got your answer.

    B Each balloon costs $0.85 . What is the total cost of the balloons Mr. Mack needs to order? Show or explain how you got your answer.

11 Donna has 52 **inches** of ribbon. She needs about 1 **foot** more ribbon for an art project. Which is the **best** ESTIMATE of the shortest length of ribbon Donna needs for her art project?

    A 3 feet

    B 4 feet

    C $5\frac{1}{2}$ feet

    D $6\frac{1}{3}$ feet

Go On

12 The table below shows the distances different types of workers can expect to walk on the job in one year.

Workers' Yearly Walking Distances

Worker	Distance (in miles)
Doctor	840
Mail carrier	1,056
Nurse	942
Police officer	1,632
Real estate agent	622
Retail clerk	792
TV reporter	1,008

Based on the information in the table, what is the **median** distance the different types of workers can expect to walk in one year?

A   792 miles
B   840 miles
C   942 miles
D   1,008 miles

13 In the five rectangles shown below, there is a relationship between the lengths of the longer side and the shorter side of each rectangle.
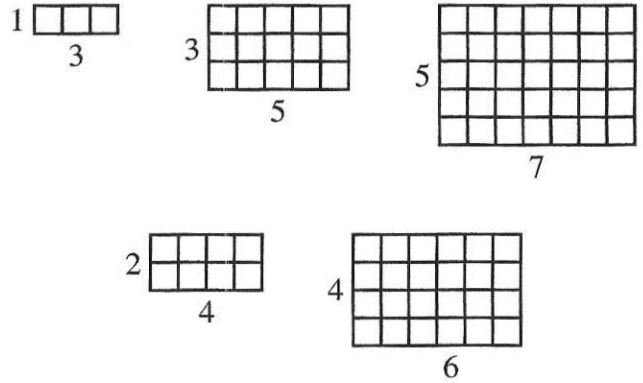

Which rule best describes the relationship?

A subtract 3 from the length of the longer side to find the length of the shorter side

B multiply the length of the shorter side by 2 to find the length of the longer side

C divide the length of the longer side by 3 to find the length of the shorter side

**D** add 2 to the length of the shorter side to find the length of the longer side

Go On

14 One square block of a city park is used as a picnic area and a playground, as shown in the diagram below.
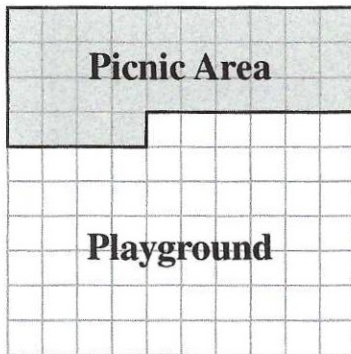
Which equation can be used to find how much more of the square block is used for the playground than the picnic area?

A $0.33 + 0.33 = 0.66$
B $0.34 + 0.66 = 1.00$
C $0.66 - 0.34 = 0.32$
D $1.00 - 0.66 = 0.34$

15 Yasmine has a paperweight shaped like a square pyramid, as shown below.
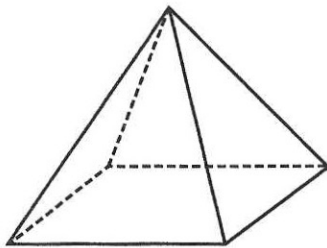
How many vertices does the paperweight have?

A 3 vertices
B 5 vertices
C 6 vertices
D 8 vertices

16 Every day, Greg records the number of pages he reads. The table below shows the number of pages Greg read during each of 5 days last week.

Greg's Weekly Reading Record

Day of the Week	Number of Pages
Monday	34
Tuesday	26
Wednesday	36
Thursday	26
Friday	38

What is the mean (average) number of pages Greg read each day?

A 26 pages
B 32 pages
C 34 pages
D 36 pages

Go On

17 Celia painted $\frac{3}{8}$ of a kitchen wall on Friday. On Saturday, she painted $\frac{2}{8}$ more of the same wall. Which shaded area **best** represents the total amount of the kitchen wall Celia painted in the two days?
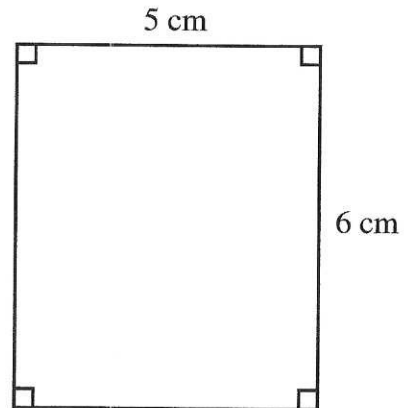
A

B

C

D
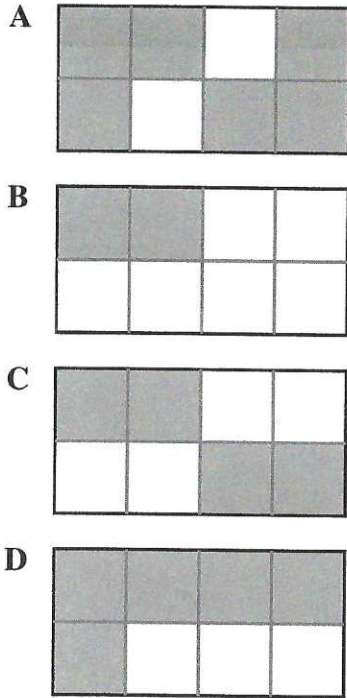
18 A number is missing in the pattern of numbers shown below.

3 15 ____ 375 1,875 9,375

What is the missing number?

A   45
B   75
C   150
D   360

19 The figure below shows the length and width of a note on Kendall's desk.

5 cm

6 cm

Which expression can be used to find the area, in square centimeters, of the note?

A $5 + 5 + 6 + 6$
B $2 \times (5 + 6)$
C $5 + 6$
D 5×6

Go On

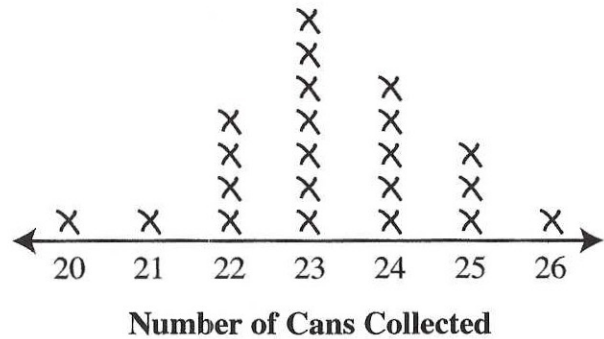**20**   Simplify: $48 - 24 \div 2 \times 3 + 1$

    A   5
    B   13
    C   37
    D   43

21   Which expression could be used to check the answer to $63 \div 7$?

    A $63 + 7$
    B 63×9
    C $7 + 9$
    D 7×9

22   Ms. Tonnie's students collected cans of food for a food drive. The line plot below shows the number of cans each student collected.

Canned Food Drive Collections

Number of Cans Collected

Key
X = 1 student

How many students collected exactly 24 cans?

    A   5 students
    B   9 students
    C   13 students
    D   18 students

Go On

23 Wesley made a rectangular flag that is 15 inches wide. The perimeter of the flag is 70 inches. What is the length of Wesley's flag?

A   10 inches
B   15 inches
C   18 inches
D   20 inches

24 Look at the inequality shown below.

$$n > 18 \div 3$$

In which set are **all** the numbers solutions of the inequality?

A   {6, 5, 4, 3, 2, 1, 0}
B   {18, 9, 6, 3, 2, 1}
C   {21, 16, 10, 9, 7}
D   {30, 24, 18, 12, 6}

25 Joel is 1.67 meters tall. Ben is 1.87 meters tall. How many meters taller is Ben than Joel?

A   0.02 meter
B   0.08 meter
C   0.2 meter
D   0.8 meter

26 There are 60 students who plan to recycle newspapers for a fundraiser. Each student expects to recycle about 4 or 5 pounds of newspapers each week. Which is the **best** ESTIMATE of the number of pounds of newspapers all the students will recycle in 4 weeks?

A   between 100 and 200 pounds
B   between 250 and 300 pounds
C   between 500 and 700 pounds
D   between 940 and 1,200 pounds

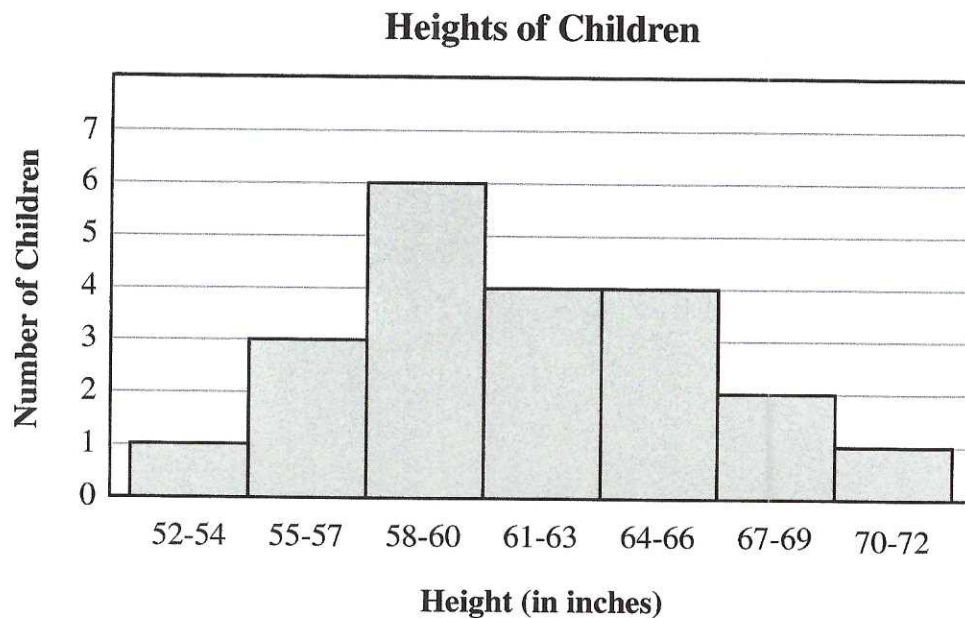**27** In the drawing below, $\triangle RQS$ is a right triangle.
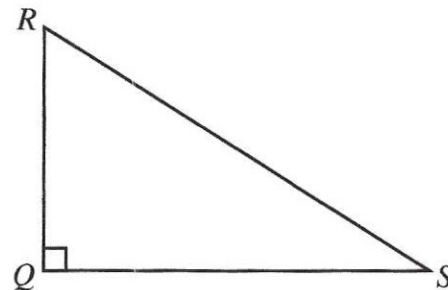
Which statement about an angle in $\triangle RQS$ must be true?

A $\angle QRS$ is a right angle.
B $\angle RSQ$ is an acute angle.
C $\angle RQS$ is an acute angle.
D $\angle QSR$ is an obtuse angle.

Go On

28 The histogram below represents the heights of 21 children. Each height is rounded to the nearest inch.

Heights of Children

Another child, Jack, is 61 inches tall. Based on the histogram, which conclusion can be made about Jack's height compared to the heights of the other 21 children?

A　Jack is taller than most of the other children.
B　There are 11 other children who must be taller than Jack.
C　Jack's height is among the heights of the 7 tallest children.
D　There are 4 other children who could be the same height as Jack.

29 Teddi used small gray triangles and small white triangles to create a pattern. The first four figures in Teddi's pattern are shown below.

Figure 1　Figure 2　Figure 3　Figure 4
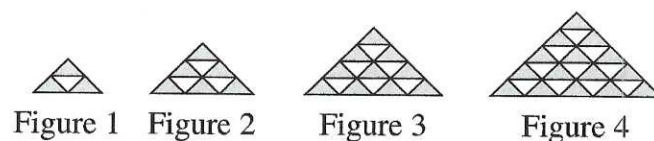
The pattern continues. How many gray triangles and white triangles are needed to make the next figure in Teddi's pattern?

A　15 gray triangles and 10 white triangles
B　18 gray triangles and 18 white triangles
C　21 gray triangles and 15 white triangles
D　28 gray triangles and 21 white triangles

Go On

> Write your answer to Question 30 on a separate sheet of paper. Be sure to answer Parts A and B.

30 The table below shows the prices of some art supplies.

Art Supplies

Item	Price (per item)
Sketch pad	$2.50
Eraser	$0.80
Pencil	$0.30

A Ms. Jefferson bought 1 sketch pad. She paid with a $5 bill. How much money should she have left over from her $5 bill? Show or explain how you got your answer.

B Ms. Jefferson wants to buy 1 eraser and some pencils with the money she has left over. What is the **greatest** number of pencils she could buy? Show or explain how you got your answer.

31 Charlene has 48 ounces of pasta salad. One serving size is 6 ounces. Which number sentence could be used to find the number of servings (p) in Charlene's pasta salad?

  A $48 \div 6 = p$
  B $48 \times 6 = p$
  C $48 - 6 = p$
  D $48 + 6 = p$

32 There are 38 bike racks at a playground. Each rack can hold 16 bikes. What is the total number of bikes that can be held in the bike racks at the playground?

  A 608 bikes
  B 468 bikes
  C 266 bikes
  D 176 bikes

Go On

33 Larry used construction paper to make a cube and 6 square pyramids. Each pyramid is the same size. The diagram below shows the cube and the 6 square pyramids.

8 cm

5 cm

8 cm
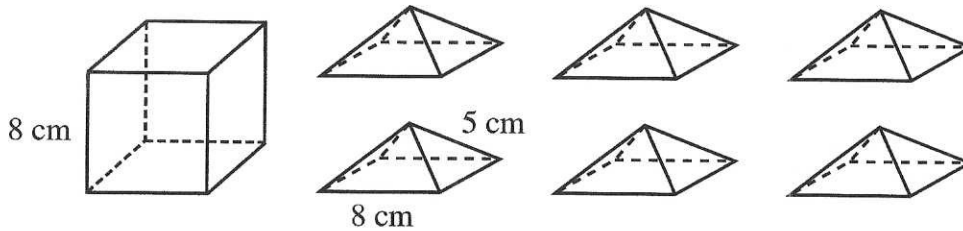
Larry used the cube and the square pyramids to create a new figure. He glued the base of each pyramid to a different face on the cube, making sure the edges were aligned. What is the total number of faces on the new figure Larry created?

A   9 faces
B   11 faces
C   24 faces
D   30 faces

---

34 The stem-and-leaf plot below shows the number of sit-ups several students completed in 1 minute.

Number of Sit-ups

2	4 6 7 8 8 9
3	0 1 2 3 6 7
4	0 0 0 1 2 3
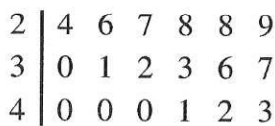
Key
3 | 0 = 30

What is the **mode** of the number of sit-ups completed by the students?

A   40 sit-ups
B   34 sit-ups
C   28 sit-ups
D   19 sit-ups

35 A store manager gave her first 35 customers a free water bottle. Each day the store manager gave away 5 water bottles more than she had given the day before. Which list shows the number of water bottles the store manager gave away each day for the first 5 days?

A   35, 39, 41, 47, 51
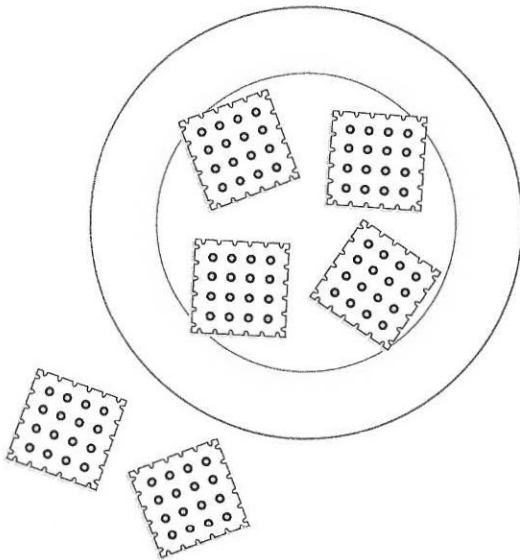B   35, 40, 45, 50, 55
C   35, 42, 49, 56, 63
D   35, 45, 55, 65, 75

Go On

36 Elise practiced basketball for $\frac{3}{4}$ **hour**.

How many **minutes** did Elise practice

basketball? (1 hour = 60 minutes)

A 15 minutes
B 30 minutes
C 45 minutes
D 50 minutes

37 The diagram below shows that 2 crackers fell off Tammy's plate.

What fraction of the crackers were left on Tammy's plate?

A $\frac{4}{4}$

B $\frac{4}{6}$

C $\frac{2}{4}$

D $\frac{2}{6}$

38 The table below shows the number of snow cones sold at a snack stand each day for 4 days during a 5-day period.

Snow Cone Sales

Day	Number Sold
Monday	63
Tuesday	56
Wednesday	77
Thursday	128
Friday	?

The mean (average) number of snow cones sold per day during the 5-day period is 84 . What was the total number of snow cones sold on Friday?

A 77 snow cones
B 81 snow cones
C 84 snow cones
D 96 snow cones

Go On

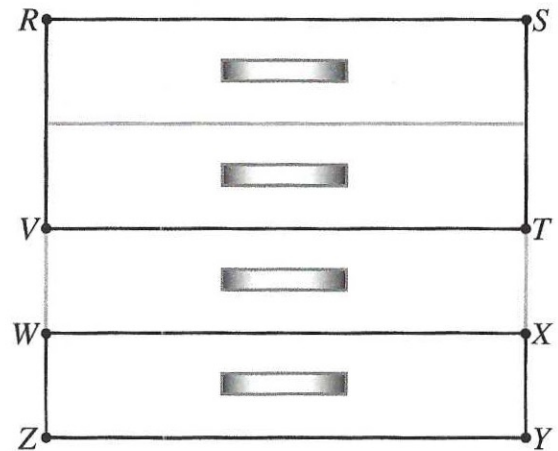**39** Look at the inequality below.

$$25 + 15 < g$$

Which value of *g* makes the inequality true?

A 15
B 25
C 40
D 50

40 The diagram below shows the front view of a piece of furniture with four equal-sized drawers. In the diagram, rectangle *RSTV* surrounds the top two drawers, and rectangle *WXYZ* surrounds the bottom drawer.

Which statement **best** describes the relationship between rectangle *RSTV* and rectangle *WXYZ* ?

A Rectangle *RSTV* is not similar to rectangle *WXYZ*.
B Rectangle *RSTV* is a reduction of rectangle *WXYZ*.
C Rectangle *RSTV* is similar and congruent to rectangle *WXYZ*.
D Rectangle *RSTV* is similar but not congruent to rectangle *WXYZ*.

Go On