

VIRGINIA STANDARDS OF LEARNING

Spring 2005 Released Test

**GRADE 3
MATHEMATICS**

CORE 1

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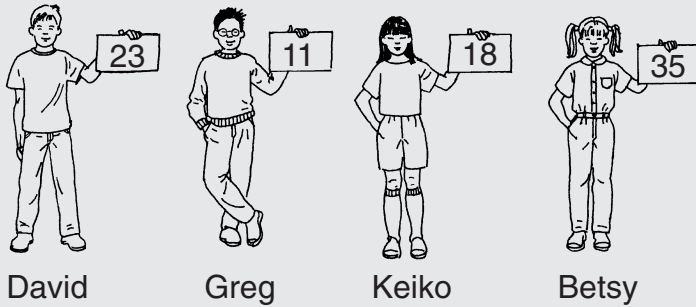
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Mathematics

DIRECTIONS

Read and solve each question. Then mark the space in the answer booklet for the best answer.

SAMPLE



David

Greg

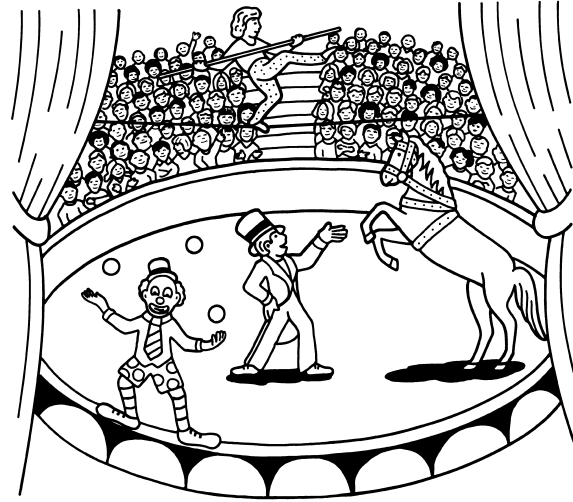
Keiko

Betsy

Who is holding a card with an even number on it?

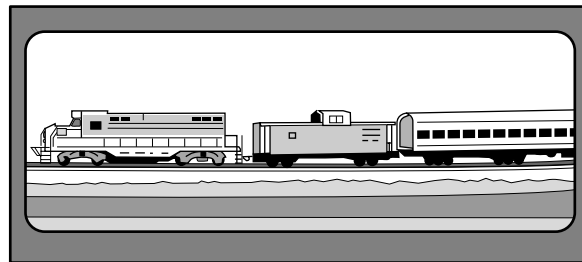
- A David
- B Greg
- C Keiko
- D Betsy

- 1 Last month, 104,629 people went to the circus. What is the value of the 6 in 104,629?**



- A 6
- B 60
- C 600
- D 6,000

- 2 Ellen counted 66 railroad cars in a train.**



What is 66 rounded to the nearest ten?

- F 50
- G 60
- H 70
- J 80

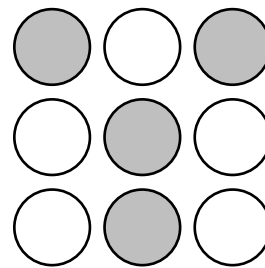
3 Which is true?

- A 1,204 is less than 1,204
- B 3,893 is greater than 3,793
- C 2,687 is less than 2,675
- D 4,312 is greater than 4,328

4 Mike's math teacher gave him the clue, $8 + 6 = 14$, to help him solve a related problem. Which could be the problem Mike is trying to solve?

- F $14 - \square = 8$
- G $8 \times \square = 48$
- H $6 \div \square = 2$
- J $14 + \square = 20$

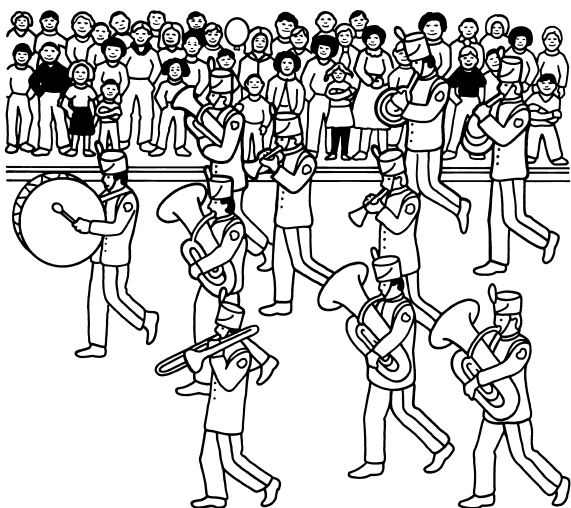
5



What fraction of the circles is shaded?

- A $\frac{5}{7}$
- B $\frac{4}{5}$
- C $\frac{4}{9}$
- D $\frac{9}{4}$

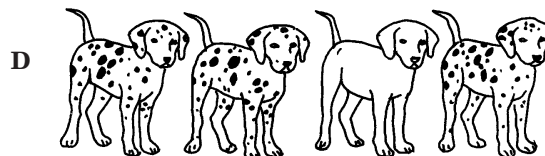
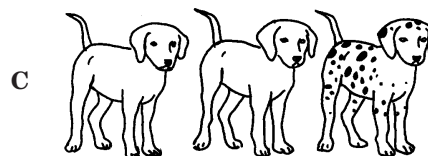
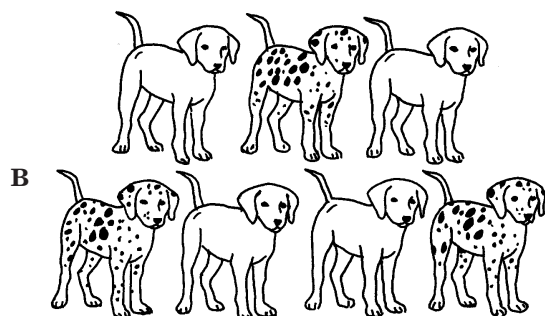
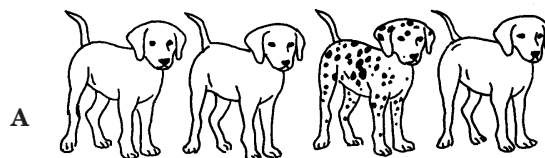
6 Last year, 345,129 people watched a parade.



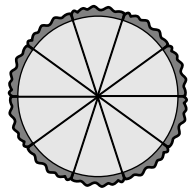
Which of the following shows 345,129 written in words?

- F Three thousand, four hundred twenty-nine
- G Three hundred forty-five, one hundred twenty-nine
- H Three thousand forty-five, one hundred twenty-nine
- J Three hundred forty-five thousand, one hundred twenty-nine

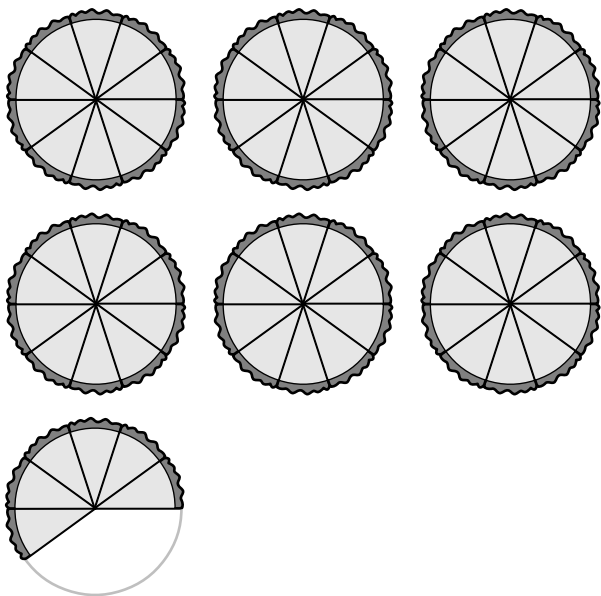
7 Which group shows $\frac{3}{4}$ of the dogs with spots?



8 The figure below represents 1 pie.

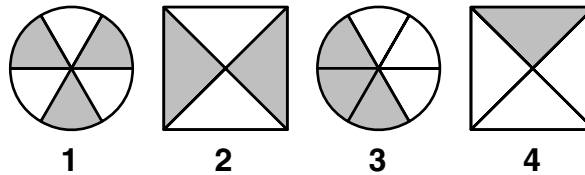


Which number is represented by the model below?



- F 0.66
- G 0.76
- H 6.6
- J 7.6

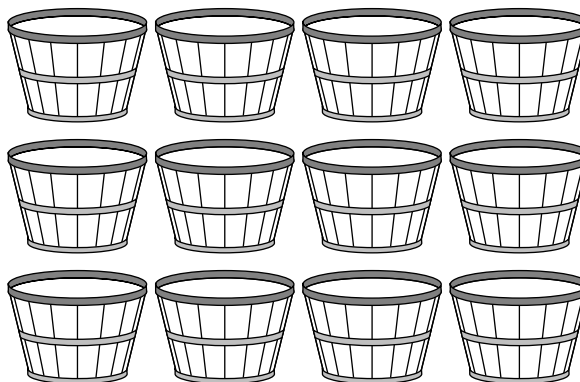
9



Which figure has LESS THAN $\frac{1}{2}$ shaded?

- A 1
- B 2
- C 3
- D 4

10



Connie put 4 apples in each basket. How many apples did she use altogether?

- F 12
- G 16
- H 38
- J 48

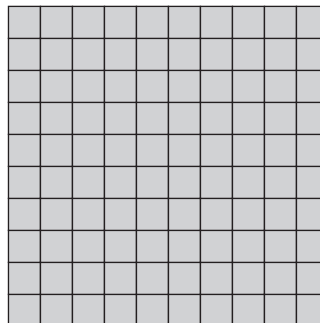
- 11 Karl wrote a book report that had 525 words.



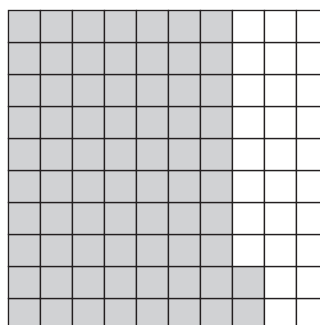
What is 525 rounded to the nearest hundred?

- A 500
- B 520
- C 530
- D 600

- 12 The model below is shaded to represent the number 1.

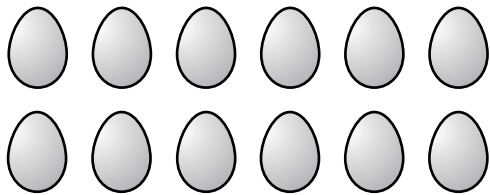


Which number is represented by the shaded portion of the model below?

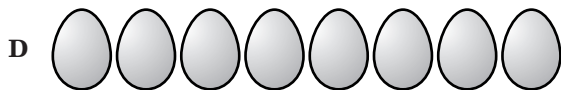
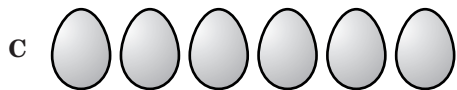
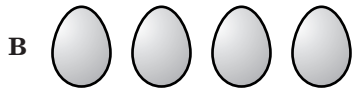
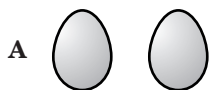


- F 0.72
- G 7.2
- H 72
- J 720

- 13 Nancy will decorate exactly $\frac{1}{2}$ of the eggs below.



Which of the following groups shows how many of the eggs she will decorate?



14 $9 \times 9 =$

- F 18
- G 36
- H 63
- J 81

- 15 The table shows the number of rocks each student collected during a field trip.

Name	Number of Rocks Collected
Jamal	11
Su	20
Gary	17
Anna	15

How many more rocks did Su collect than Anna?

- A 5
- B 7
- C 10
- D 11

- 16 Last year, there were exactly 2,467 students attending Lee Elementary School. This year, there are 310 more students attending the school. How many students are attending Lee Elementary School this year?

- F 5,567
- G 5,477
- H 2,777
- J 2,157

17 $3.9 - 2.8 =$

- A 0.9
- B 1.1
- C 1.9
- D 11

18 Which number sentence is in the same family of facts as

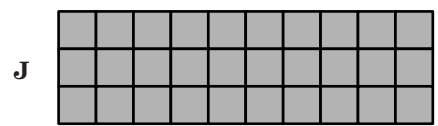
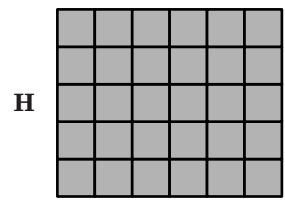
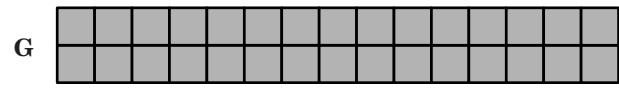
$8 + 5 = 13$?

- F $13 + 8 = 21$
- G $5 + 13 = 18$
- H $13 - 5 = 8$
- J $8 - 5 = 3$

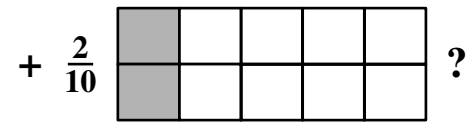
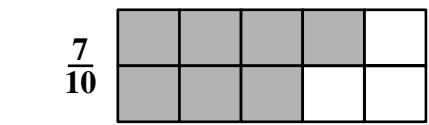
19 $49 \div 7 =$

- A 6
- B 7
- C 8
- D 9

20 Which of the area models shown below BEST represents 3×10 ?

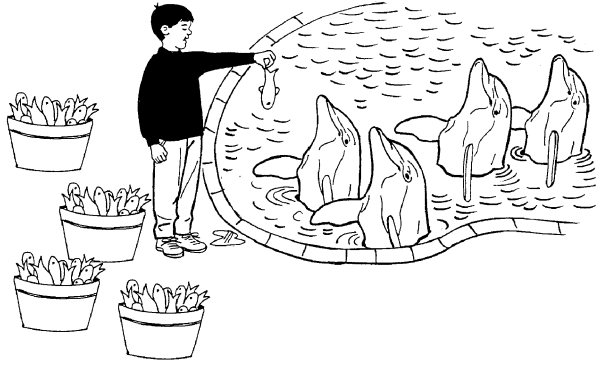


21 What is



- A $\frac{9}{20}$
- B $\frac{9}{10}$
- C $\frac{9}{11}$
- D $\frac{9}{1}$

22



Dan fed 4 dolphins. Each dolphin ate 28 fish. How many fish did the dolphins eat all together?

- F 832
- G 112
- H 82
- J 32

23 Last year, students collected 2,195 pounds of paper. This year's students collected 1,681 pounds more than last year's students. What was the total amount of paper collected by this year's students?

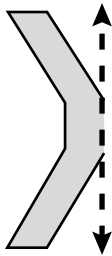
- A 514 pounds
- B 1,514 pounds
- C 3,776 pounds
- D 3,876 pounds

24

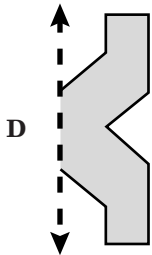
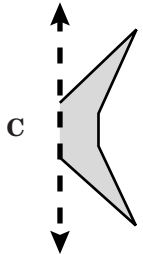
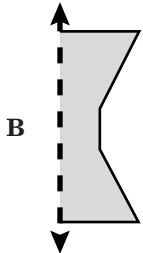
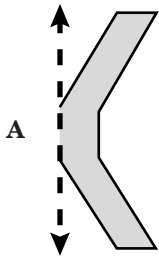
$$\begin{array}{r} 21.3 \\ + 15.9 \\ \hline \end{array}$$

- F 36.2
- G 37.2
- H 37.6
- J 47.2

25 Look at the figure shown below.



Which of the following would complete the figure so that it has a line of symmetry?



26 Which is CLOSEST to the amount of water Peter's glass will hold when full?

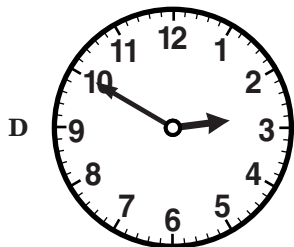
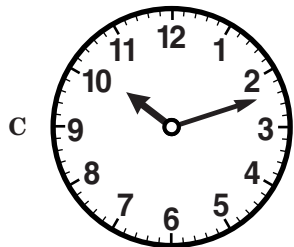
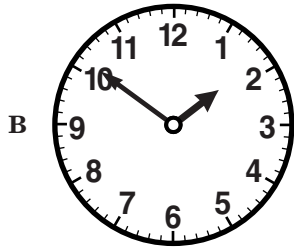
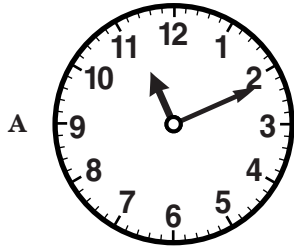


- F 2 gallons
- G 2 pints
- H 2 quarts
- J 2 cups

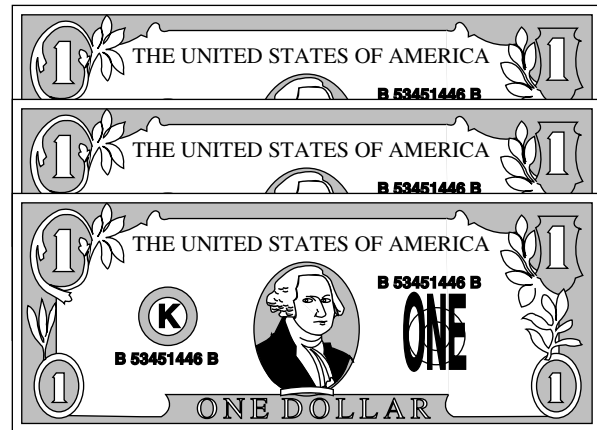
- 27 The clock below shows the time when David finished his reading test.



Which of the following clocks shows the same time as the clock above?



- 28 What is the total value of the money shown below?



- F \$3.61
 G \$3.90
 H \$4.75
 J \$5.00

29

AUGUST						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

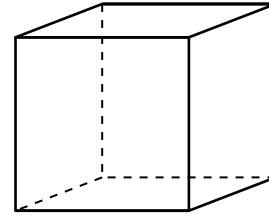
Sarah's birthday is on the third Sunday in August. When is her birthday?

- A August 3
- B August 14
- C August 21
- D August 28

30 Adam spent exactly 60 minutes at the library. How many hours did he spend at the library?

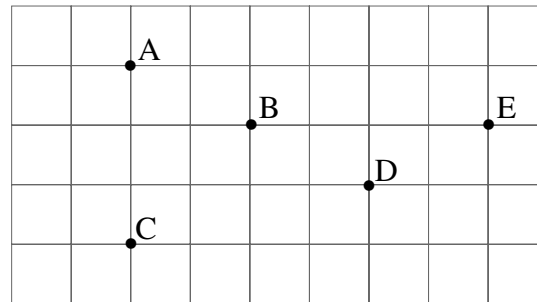
- F 1
- G 2
- H 3
- J 4

31 How many FACES does the figure shown below have?



- A 3
- B 4
- C 6
- D 8

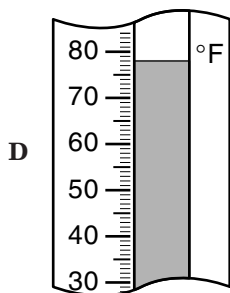
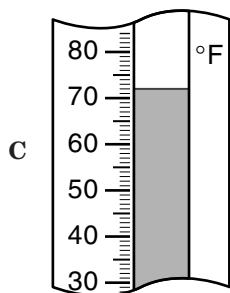
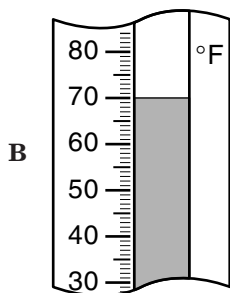
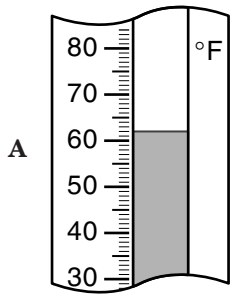
32 You can draw on the grid to help find the answer.



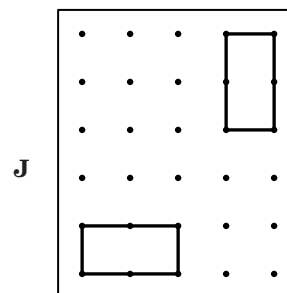
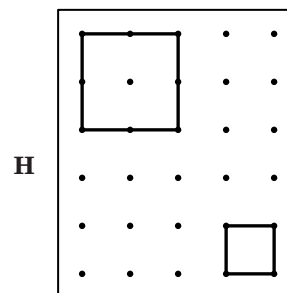
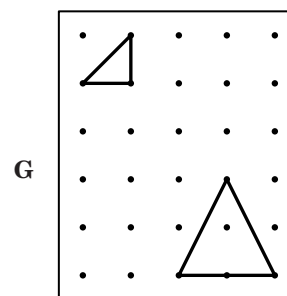
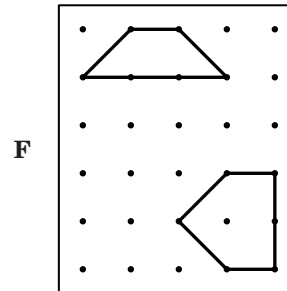
Three of the points on the grid above can be connected to make one line segment. Which three points are they?

- F Points *A*, *B*, and *D*
- G Points *A*, *B*, and *E*
- H Points *C*, *D*, and *E*
- J Points *B*, *C*, and *D*

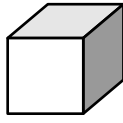
33 Which thermometer shows 72° Fahrenheit?



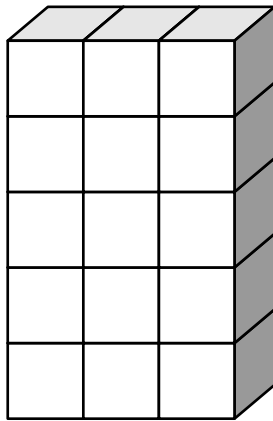
34 Which piece of dot paper shows two figures that are the same size and shape?



35 This is 1 cube.



How many of these cubes are needed to make the group shown below?



- A 23
- B 21
- C 18
- D 15

36 Use your centimeter ruler to help you answer this question.

Which is closest to the distance around this figure?



- F 8 centimeters
- G 6 centimeters
- H 4 centimeters
- J 2 centimeters

37 The picture graph below shows the number of apples four friends picked on Saturday.

Apples Picked

Name	Number of Apples
Marcel	
Rebecca	
Angelo	
Joyce	

Each represents 10 apples.

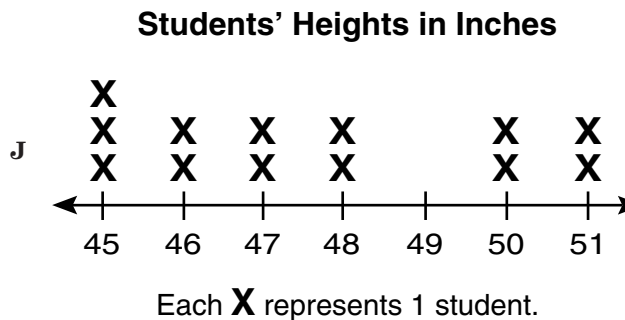
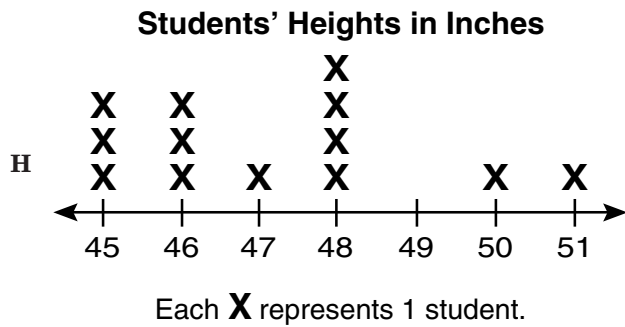
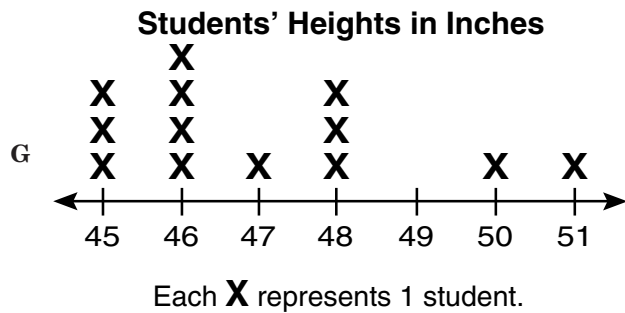
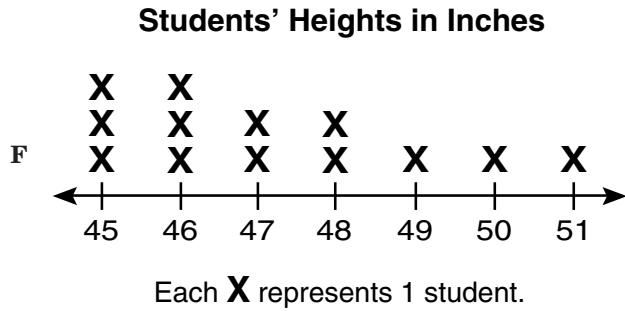
Who picked exactly 50 apples?

- A Marcel
- B Rebecca
- C Angelo
- D Joyce

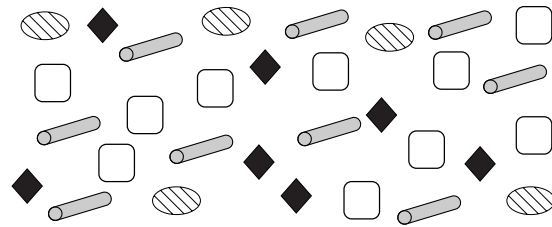
38 The list below shows the height in inches of each student in Monika's class.

45, 48, 46, 47, 45, 50, 45,
46, 46, 51, 48, 48, 46

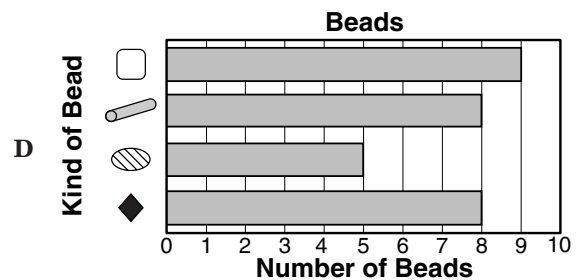
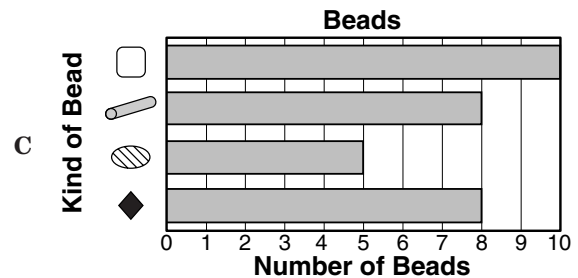
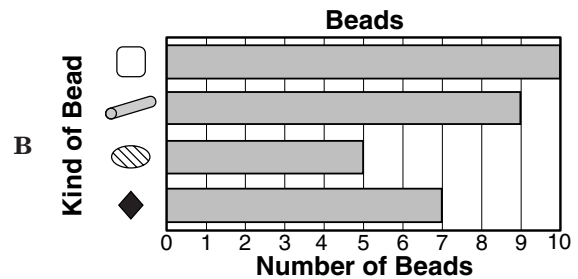
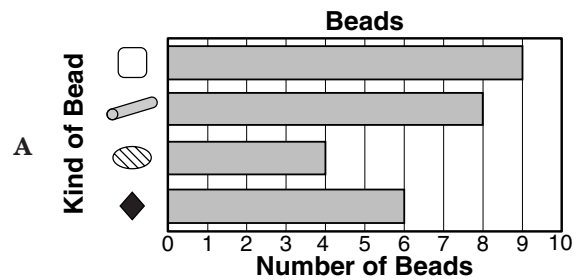
Which of the following shows this data correctly plotted?



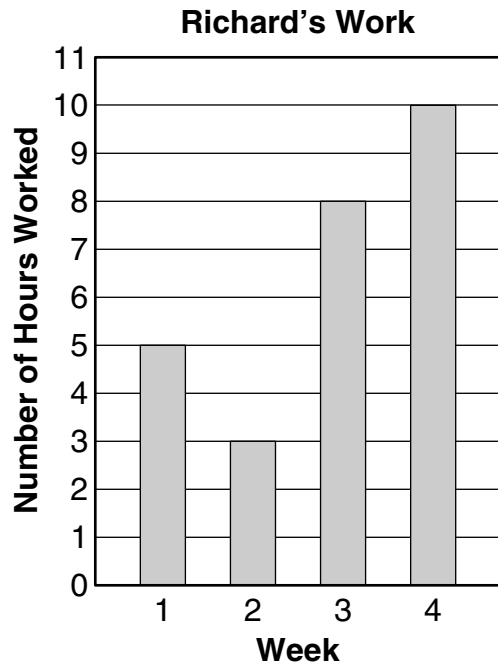
39 Amy has these beads to make a necklace.



Which bar graph correctly shows the number of each kind of bead?



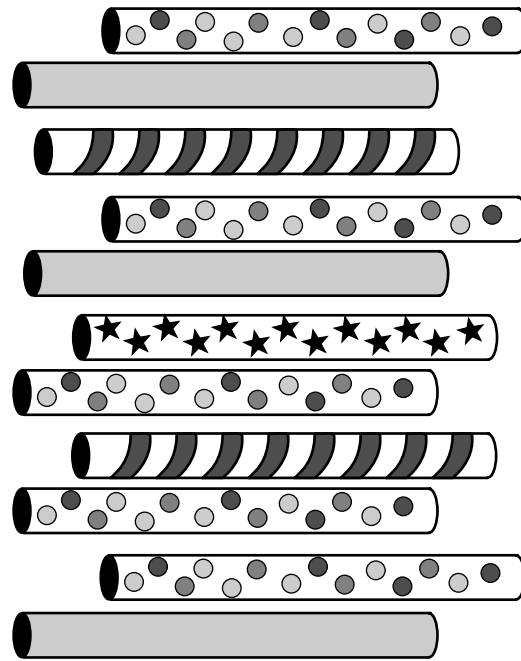
- 40 The bar graph below shows the number of hours Richard worked.



How many hours did Richard work altogether?

- F 4
- G 10
- H 16
- J 26





- 41 These rolls of wrapping paper were placed in a basket and mixed up.




If Lamont picks 1 roll without looking, what kind of paper is it MOST LIKELY to be?

- A
- B
- C
- D

42 The picture graph shows the number of 4 different kinds of flowers that a shop used on Saturday.

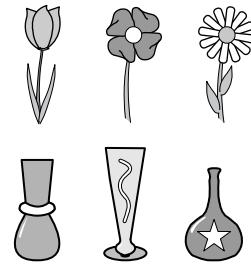
Flowers Used	
Flower	Number Used
Roses	
Lilies	
Daisies	
Tulips	

Key  = 10 flowers.

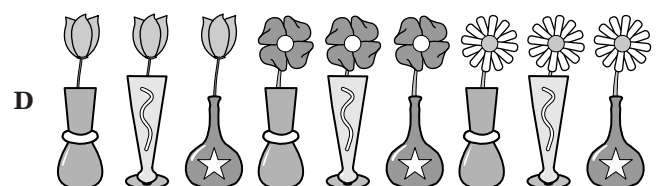
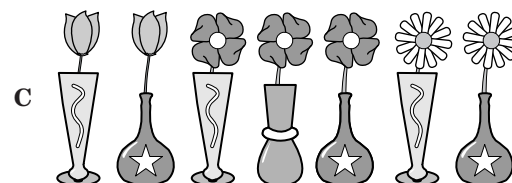
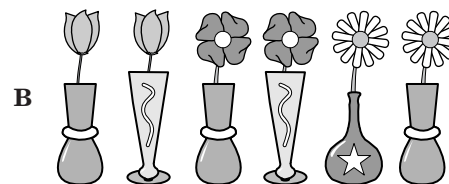
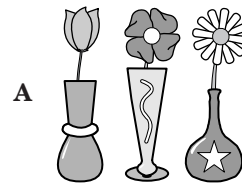
How many tulips did the shop use?

- F 6
- G 16
- H 60
- J 66

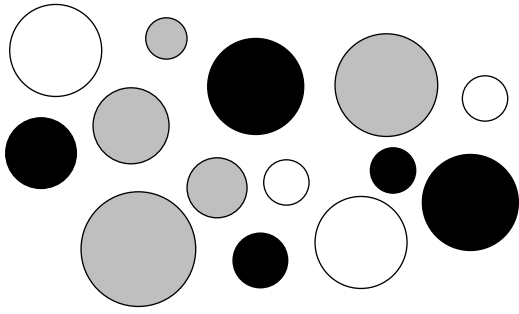
43 Mrs. Taft has these flowers and vases to choose from.



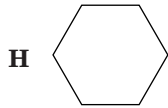
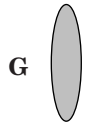
Which shows all the possible ways she can combine 1 flower and 1 vase?



44 Look at the group of objects below.



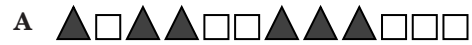
Which of the following is MOST LIKE all the objects in the group?



45 These notes form a pattern.



Which of these shows the same kind of pattern?



46 Look at the pattern of numbers shown below.

70 65 60 55 ?

If the pattern continues decreasing in the same way, what will be the next number?

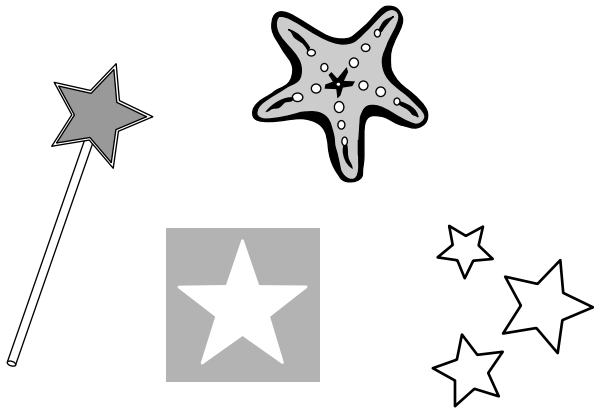
F 60

G 50

H 45

J 40

47 Look at the objects in the group below.



Which of the following **BEST** describes how the things in the group are alike?

- A Shape
- B Size
- C Color
- D Weight

48 Which symbol goes in the to make this sentence true?

$$7 + 2 \square 4 + 5$$

- F =
- G >
- H <
- J \div

- 49 The table below shows the prices of different numbers of oranges at a fruit stand.

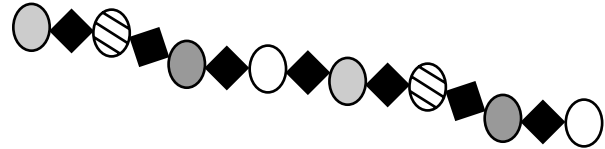
Orange Prices

Number of Oranges	Price
1	7¢
3	21¢
5	35¢
7	49¢
9	?

If the pattern in the table continues, what will be the price of 9 oranges?

- A 50¢
- B 56¢
- C 63¢
- D 70¢

- 50 Leonard is stringing beads in the pattern shown. The pattern is formed by repeating the first eight beads over and over.



If Leonard continues the pattern in the same way, what should be the next two beads he adds to the string?



Answer Key

Test Sequence	Correct Answer	Reporting Category	Reporting Category Description
1	C	006	Number and Number Sense
2	H	006	Number and Number Sense
3	B	006	Number and Number Sense
4	F	006	Number and Number Sense
5	C	006	Number and Number Sense
6	J	006	Number and Number Sense
7	D	006	Number and Number Sense
8	H	006	Number and Number Sense
9	D	006	Number and Number Sense
10	J	006	Number and Number Sense
11	A	006	Number and Number Sense
12	F	006	Number and Number Sense
13	C	006	Number and Number Sense
14	J	007	Computation and Estimation
15	A	007	Computation and Estimation
16	H	007	Computation and Estimation
17	B	007	Computation and Estimation
18	H	007	Computation and Estimation
19	B	007	Computation and Estimation
20	J	007	Computation and Estimation
21	B	007	Computation and Estimation
22	G	007	Computation and Estimation
23	D	007	Computation and Estimation
24	G	007	Computation and Estimation
25	A	008	Measurement and Geometry
26	J	008	Measurement and Geometry
27	B	008	Measurement and Geometry
28	J	008	Measurement and Geometry
29	C	008	Measurement and Geometry
30	F	008	Measurement and Geometry
31	C	008	Measurement and Geometry
32	F	008	Measurement and Geometry
33	C	008	Measurement and Geometry
34	J	008	Measurement and Geometry
35	D	008	Measurement and Geometry
36	F	008	Measurement and Geometry
37	B	009	Probability and Statistics
38	G	009	Probability and Statistics
39	B	009	Probability and Statistics
40	J	009	Probability and Statistics
41	A	009	Probability and Statistics
42	H	009	Probability and Statistics
43	D	009	Probability and Statistics
44	J	010	Patterns, Functions, and Algebra
45	D	010	Patterns, Functions, and Algebra
46	G	010	Patterns, Functions, and Algebra
47	A	010	Patterns, Functions, and Algebra
48	F	010	Patterns, Functions, and Algebra
49	C	010	Patterns, Functions, and Algebra
50	G	010	Patterns, Functions, and Algebra