VIRGINIA STANDARDS OF LEARNING

Spring 2007 Released Test

GRADE 3 MATHEMATICS

Form M0117, CORE 1

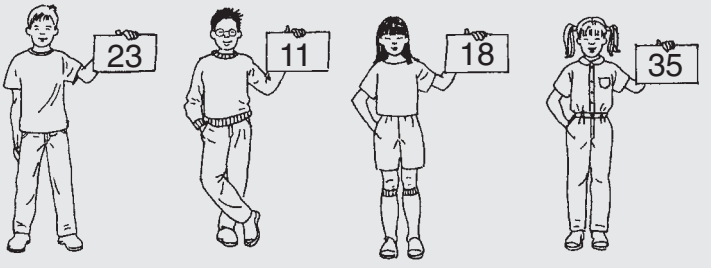
Property of the Virginia Department of Education

©2007 by the Commonwealth of Virginia, Department of Education, P.O. Box 2120, Richmond, Virginia 23218-2120. All rights reserved. Except as permitted by law, this material may not be reproduced or used in any form or by any means, electronic or mechanical, including photocopying or recording, or by any information storage or retrieval system, without written permission from the copyright owner. Commonwealth of Virginia public school educators may reproduce any portion of these released tests for non-commercial educational purposes without requesting permission. All others should direct their written requests to the Virginia Department of Education, Division of Student Assessment and School Improvement, at the above address or by e-mail to Student_Assessment@doe.virginia.gov.

DIRECTIONS

Read and solve each question. Then mark the space on your answer document for the best answer.

SAMPLE



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

A David
B Greg
C Keiko
D Betsy

1 The Parents' Club sold 2,487 tickets for the winter festival. What is 2,487 rounded to the nearest hundred?

A 2,400
B 2,470
C 2,480
D 2,500

GO ON

2 Which of the following shows "nine hundred seven thousand, four hundred eighteen" in standard form?

F 9,007,418

G 970,418

H 907,480

J 907,418

3 Which is true?

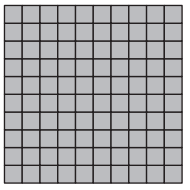
A $6,473 > 6,374$

B $6,473 < 6,347$

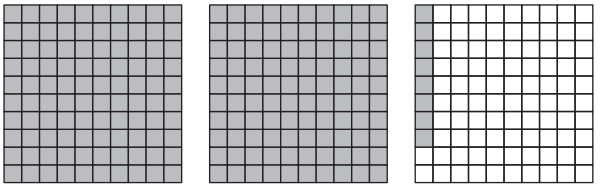
C $6,473 < 6,437$

D $6,473 > 6,734$

4 The figure below is shaded to represent the number 1.

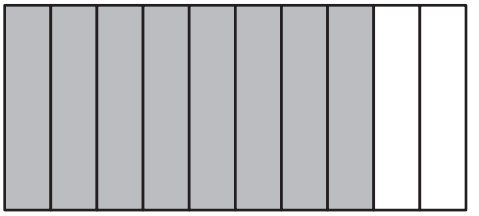


What number is represented by the model below?



F 0.28
G 2.08
H 2.80
J 8.20

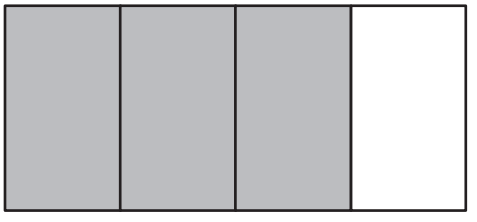
5 This model is shaded to show a fraction of a whole.



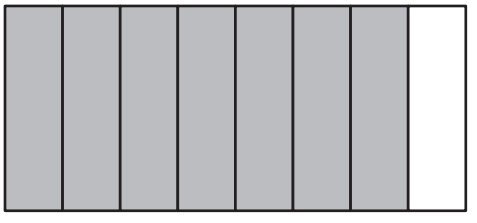
Which of the following is shaded to show a fraction with a value GREATER THAN the one above?

A

B



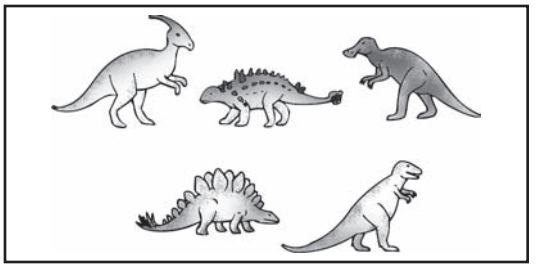
C



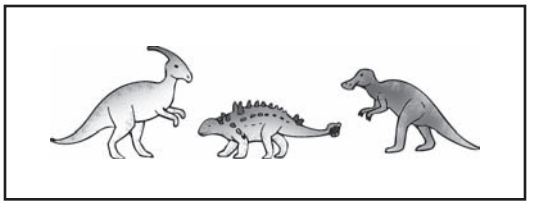
D

6 In which picture is there an even number of dinosaurs?

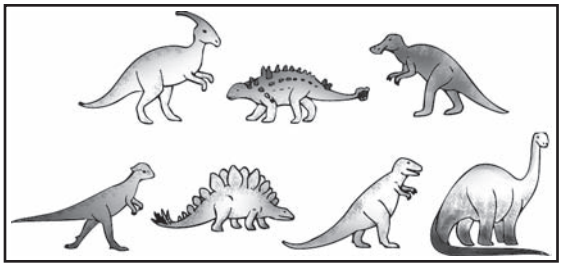
F



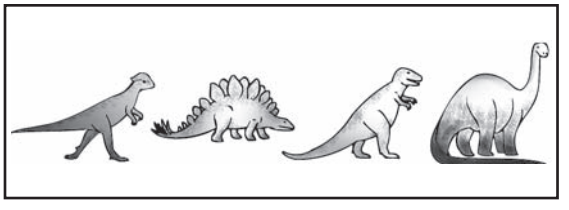
G



H



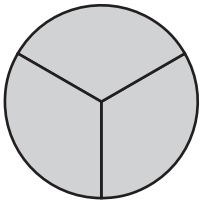
J



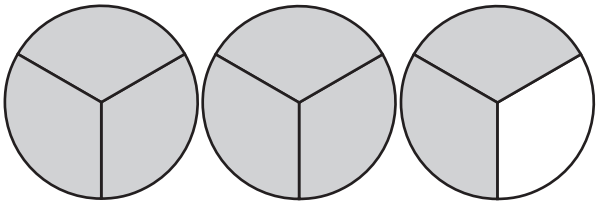
7 What is 9,999 rounded to the nearest hundred?

A 9,000
B 9,900
C 10,000
D 100,000

8 The model below represents the number 1.



Which number is represented by the model shown below?



F $2\frac{2}{3}$

G $2\frac{1}{2}$

H $2\frac{1}{3}$

J $1\frac{2}{3}$

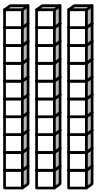
9 A toy store sold 274,091 games in one year. What is the value of the 7 in 274,091?

A 70
B 700
C 7,000
D 70,000

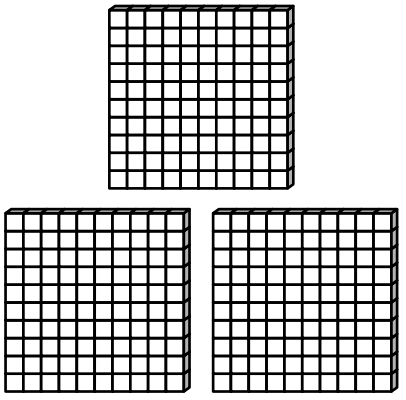
10 This ▫ represents a value of 1.

Which model represents the value of 3 in 168,342?

F

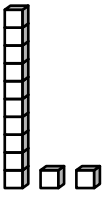


G

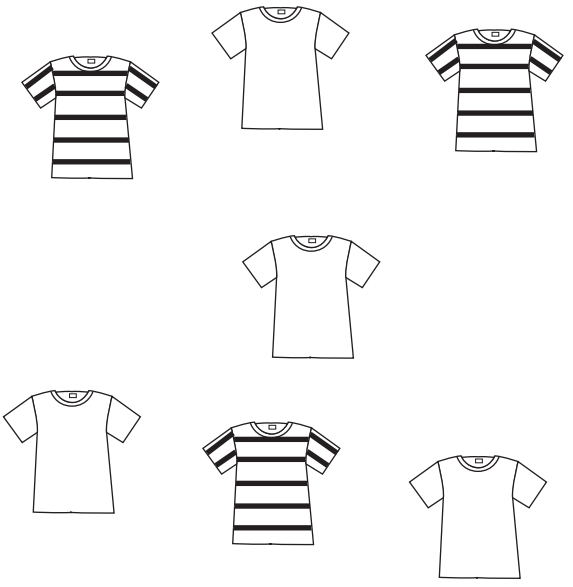


H

J



11



What fraction of the group of T-shirts is striped?

A $\frac{3}{7}$

B $\frac{4}{7}$

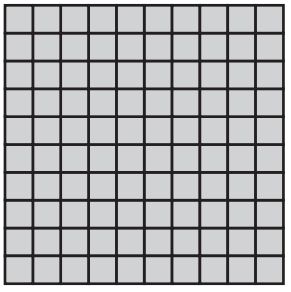
C $\frac{4}{3}$

D $\frac{7}{3}$

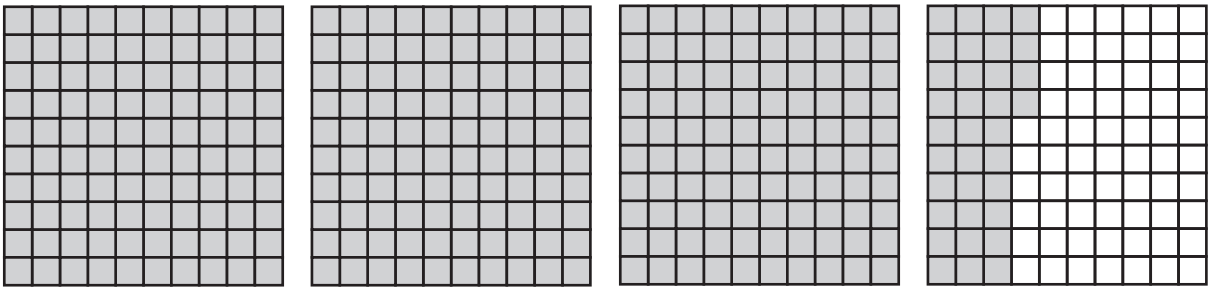
12 Which is true?

F 704 is greater than 750
G 212 is less than 200
H 836 is greater than 736
J 525 is less than 499

13 This model is shaded to show 1 whole.



What decimal is shown by the model below?



A 0.34
B 3.34
C 3.40
D 33.40

14 **There are 4 tables. Chris put 6 plates on each table. What is the total number of plates Chris put on the tables?**

F 2
G 10
H 18
J 24

15 $36 \div 4 =$

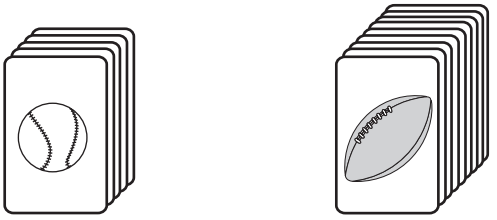
A 6
B 7
C 8
D 9

16 $4 \times 8 =$

F 36
G 32
H 28
J 12

GO ON

17 Juan has 147 baseball cards and 259 football cards.



147 259

How many more football cards than baseball cards does Juan have?

A 11

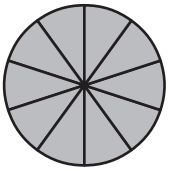
B 12

C 102

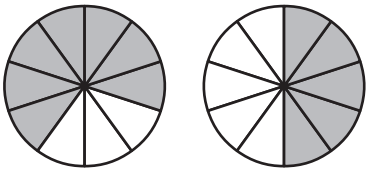
D 112

GO ON

18 This model is shaded to show one whole.



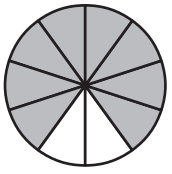
The two models below are each shaded to show a fraction.



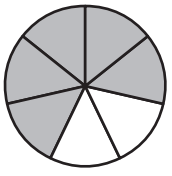
Model 1 **Model 2**

One fraction is subtracted from the other. Which model is shaded to show the difference?

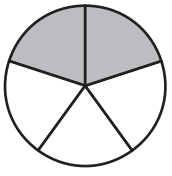
F



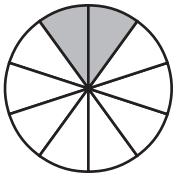
G



H



J



19 $2,408 + 692 =$

A 2,090
B 3,100
C 8,328
D 9,328

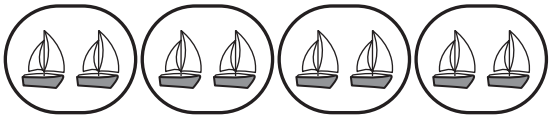
20
$$\begin{array}{r} 3.5 \\ +\ 2.8 \\ \hline \end{array}$$

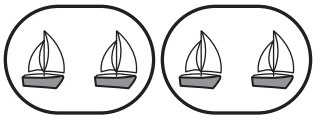
F 5.13
G 5.3
H 6.13
J 6.3

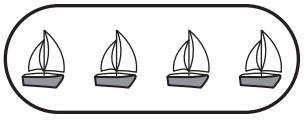
21 $8 \times 9 =$

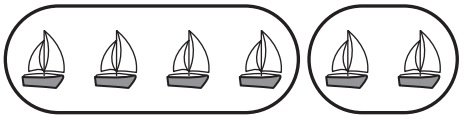
A 17
B 64
C 72
D 81

22 Which set model BEST shows 4×2 ?

F 

G 

H 

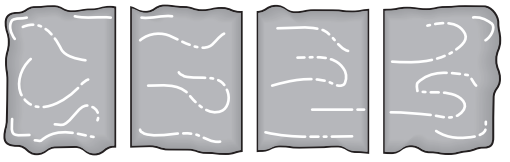
J 

23 $4.9 + 2.3 =$

A 6.1
B 6.2
C 7.2
D 7.3

GO ON

24 Mark divided a large chocolate bar into 4 equal pieces. He gave 1 piece to his friend and took 1 piece for himself.



What fractional part of the candy bar was left?

F $\frac{1}{4}$

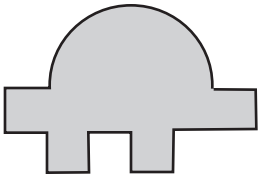
G $\frac{1}{3}$

H $\frac{2}{4}$

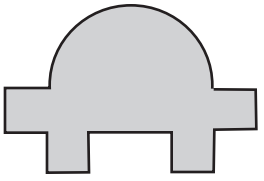
J $\frac{2}{3}$

25 Which of the figures below appears to have a line of symmetry?

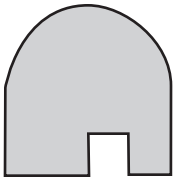
A



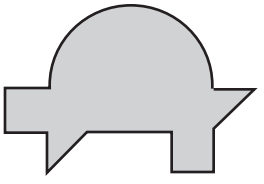
B



C



D



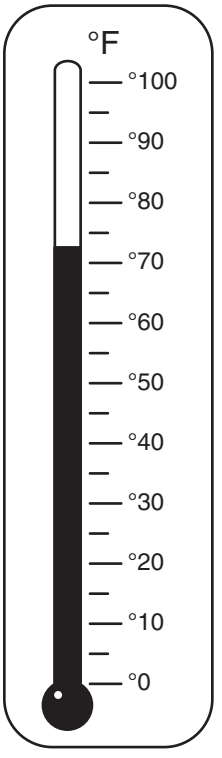
26 Which of the following units can be used to record the weight of a bicycle?

F Cups
G Gallons
H Miles
J Pounds

27 Ginger wore braces for exactly 1 year. How many days did she wear braces in all?

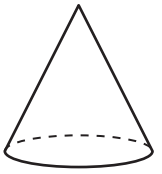
A 365
B 30
C 12
D 7

28 Which is CLOSEST to the temperature shown on the thermometer?



F 80ºF
G 70ºF
H 65ºF
J 60ºF

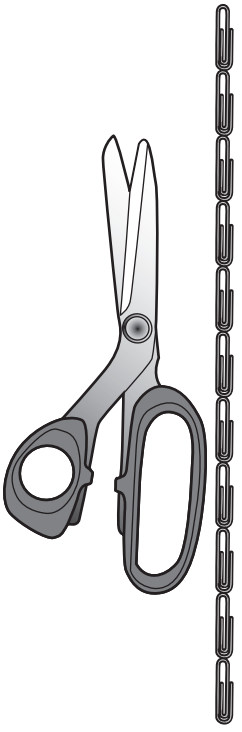
29 What is the correct name for the figure pictured below?



A Cone
B Cylinder
C Prism
D Pyramid

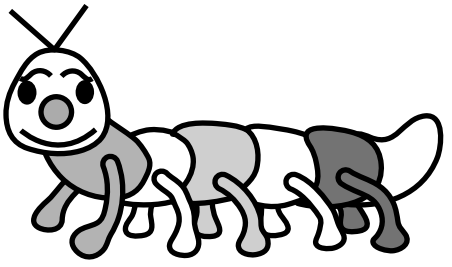
GO ON

30 Which is CLOSEST to the length of the scissors?



F 6 paper clips
G 7 paper clips
H 9 paper clips
J 11 paper clips

31 Elijah drew this picture of a caterpillar in science class.



Which part of the caterpillar BEST represents an angle?

A

B

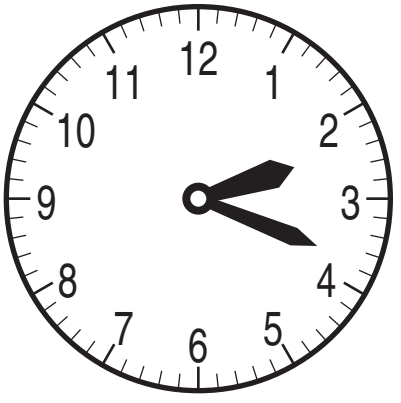
C

D

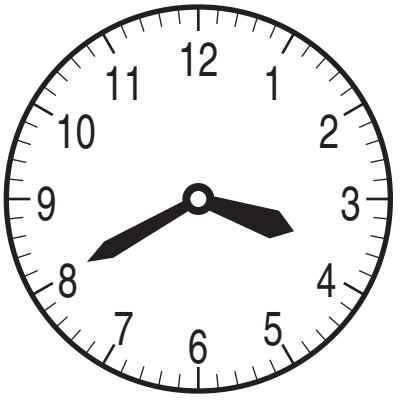
32 Which clock shows NEAREST to 3:20?

F

G



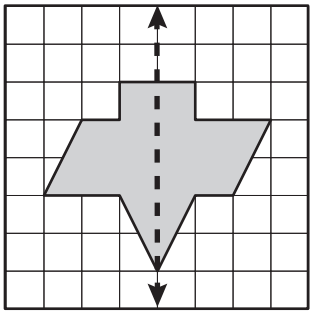
H



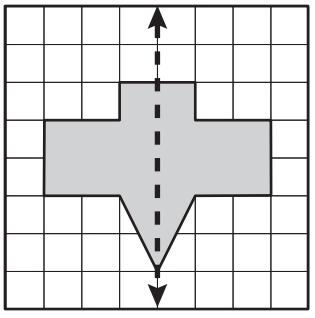
J

33 On which of the following does the heavy dotted line appear to be a line of symmetry of the shaded figure?

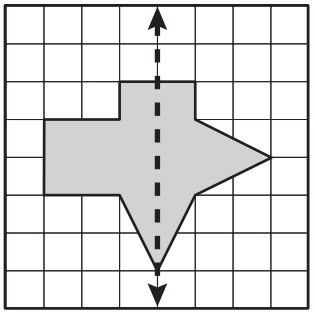
A



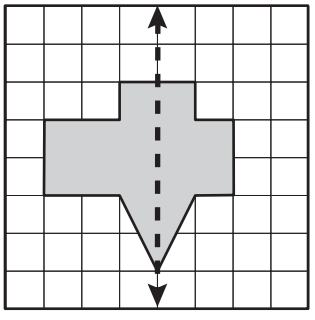
B



C



D



34 Which statement about a square is true?

F Two sides are longer than the other two sides.

G All four sides are different lengths.

H One side is shorter than the other sides.

J All four sides are of equal length.

35 Daniel had this money in a bank.

His brother gave him the money shown below.

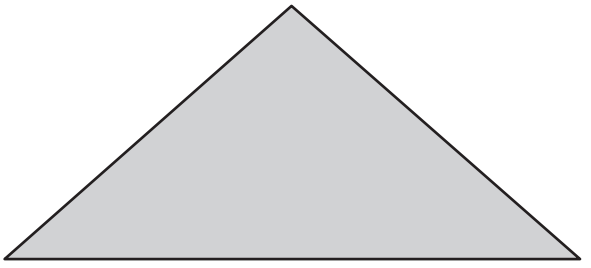
What is the total amount of money Daniel has altogether?

A $4.50
B $4.25
C $4.00
D $3.75

GO ON

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

Which is CLOSEST to the distance around this figure?



F 3 inches
G 7 inches
H 12 inches
J 18 inches

GO ON

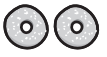
37 The chart shows the number of packages of donuts sold.

Packages of Donuts Sold

Weekday	Thu.	Fri.	Sat.	Sun.
Number Sold	4	8	14	10

Ken made the following pictograph using the data from the chart.

Packages of Donuts Sold

Weekday	**Number Sold**
Thu.	
Fri.	
Sat.	
Sun.	

Which key correctly completes Ken's pictograph?

A **Key**: Each represents 1 package.

B **Key**: Each represents 2 packages.

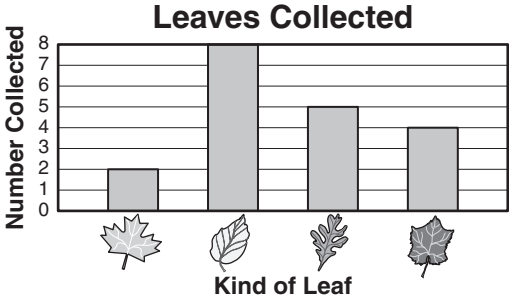
C **Key**: Each represents 5 packages.

D **Key**: Each represents 10 packages.

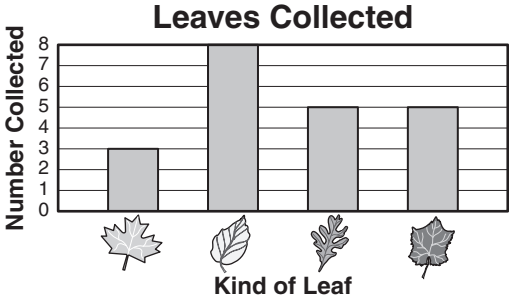
38 These are the leaves Sandy collected for school.

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

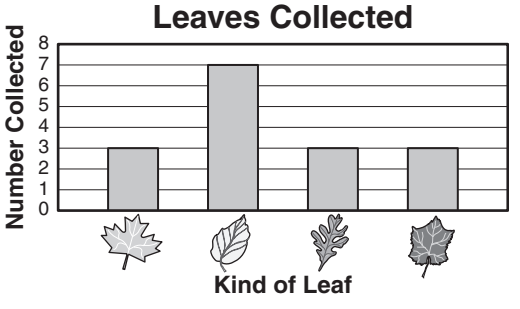
F



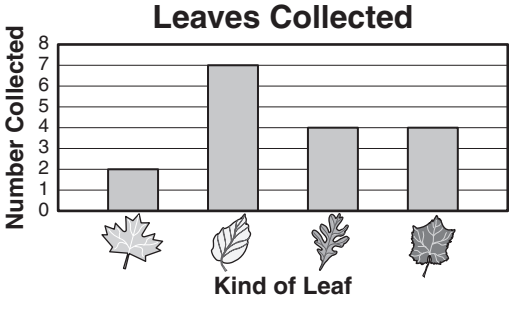
G



H



J



GO ON

39 A bakery made four different kinds of doughnuts. The pictograph below shows the number of each kind of doughnut sold one morning.

Doughnuts Sold

Kind of Doughnut	Number Sold
Glazed	
Chocolate	
Plain	
Sprinkles	

Key: Each represents 10 doughnuts.

Based on the data in the graph, what was the total number of chocolate doughnuts sold?

A 6

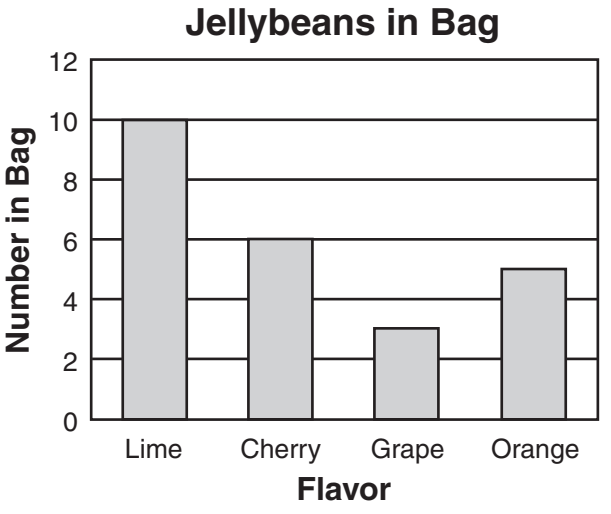
B 16

C 19

D 60

GO ON

40 The bar graph below shows the number of each flavor jellybean in a bag.

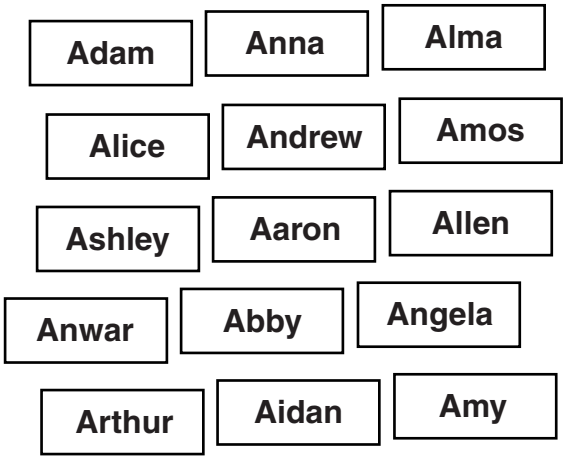


Based on the graph, how many grape jellybeans were in the bag?

F 1
G 2
H 3
J 4

GO ON

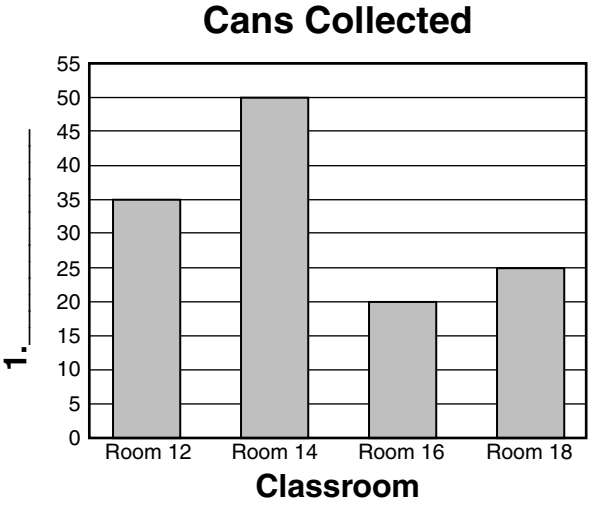
41 All the cards shown below are put in a box.



Shanna picked 1 card from the box without looking. Which of the following best describes the chances that the name on the card she picked began with the letter A?

A Certain
B Likely, but not certain
C Unlikely, but not impossible
D Impossible

42 Fran is making the graph below to show the number of cans collected by students in each of four classrooms.



Which label should Fran place on line 1?

F Kinds of Food
G Sizes of Cans
H Number of Cans Collected
J Days of Collection

GO ON

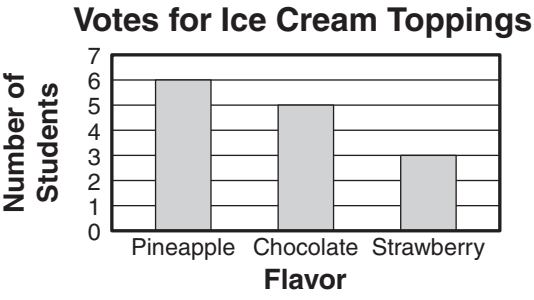
43 **Mr. Garza's class voted for the flavor of topping they wanted for their ice cream. The results are shown in the table below.**

Votes for Ice Cream Toppings

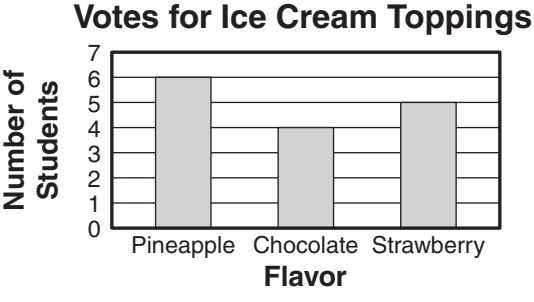
Student	Topping Flavor
Mandy	Strawberry
Johnny	Chocolate
Terrence	Chocolate
Lizzie	Strawberry
Mary	Strawberry
Sylvia	Chocolate
Brad	Chocolate
Sean	Pineapple
Ginger	Strawberry
Lisa	Pineapple
Josh	Chocolate
Ashton	Strawberry
Kristi	Pineapple
David	Chocolate

Which graph correctly shows the data in the table?

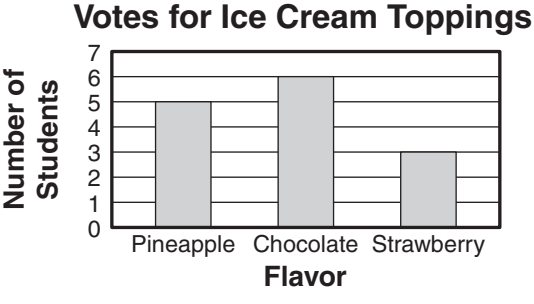
A



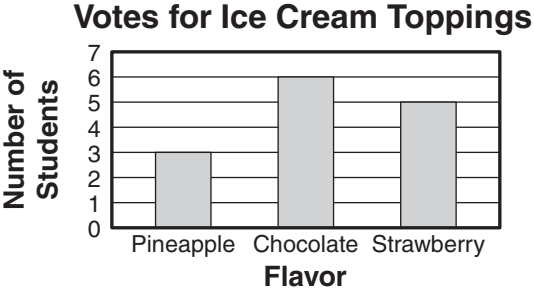
B



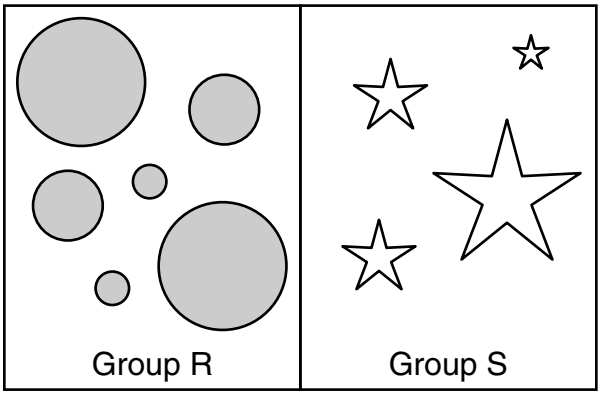
C



D



44 Paul sorted some shapes into the following two groups. He placed shapes with the same shape and the same shading into each group.



Which shape should Paul include in Group R?

F

G

H

J

GO ON

45 The first five numbers in a pattern are shown below. A subtraction rule was used to find each new number in the pattern.

125 105 85 65 45 ?

If the subtraction pattern is continued in the same way, what will be the next number in the pattern?

A 25
B 35
C 44
D 46

46 Which number can be placed on the line to make the number sentence true?

$$\mathbf{17} = __ \times \mathbf{17}$$

F 0
G 1
H 2
J 17

GO ON

47 Yoshi used a skip counting rule to complete the number pattern shown.

312 315 318 321 324 ___

The skip counting rule continues. What will be the next number in Yoshi's pattern?

A 325

B 327

C 330

D 332

GO ON

48 The table shows the total costs of different numbers of pencils.

Pencil Costs

Number of Pencils	Total Cost
1	$0.25
2	$0.50
3	$0.75
4	$1.00
5	$1.25
6	?

Based on the pattern in the table, what will be the total cost for 6 pencils?

F $1.00
G $1.25
H $1.50
J $1.75

GO ON

49 $9 \times 2 =$

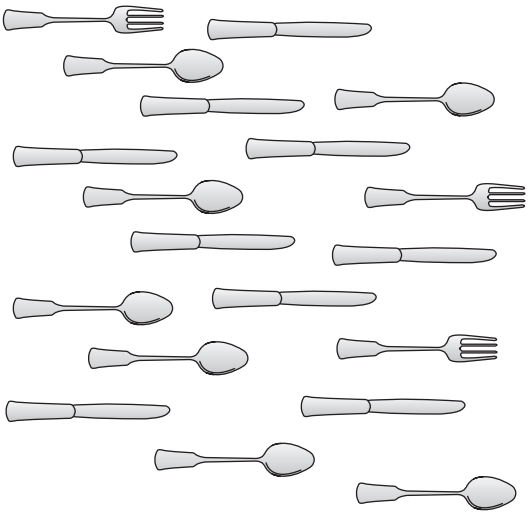
A 6×3

B 3×3

C 3×8

D 5×3

50 Susan found these in an old box.



Which chart shows the correct number of each?

F

	4
	6
	9

G

	2
	7
	8

H

	3
	7
	9

J

	3
	6
	8

STOP

Answer Key-3070-M0117

Test Sequence Number	Correct Answer	Reporting Category	Reporting Category Description
1	D	001	Number and Number Sense
2	J	001	Number and Number Sense
3	A	001	Number and Number Sense
4	G	001	Number and Number Sense
5	C	001	Number and Number Sense
6	J	001	Number and Number Sense
7	C	001	Number and Number Sense
8	F	001	Number and Number Sense
9	D	001	Number and Number Sense
10	G	001	Number and Number Sense
11	A	001	Number and Number Sense
12	H	001	Number and Number Sense
13	B	001	Number and Number Sense
14	J	002	Computation and Estimation
15	D	002	Computation and Estimation
16	G	002	Computation and Estimation
17	D	002	Computation and Estimation
18	J	002	Computation and Estimation
19	B	002	Computation and Estimation
20	J	002	Computation and Estimation
21	C	002	Computation and Estimation
22	F	002	Computation and Estimation
23	C	002	Computation and Estimation
24	H	002	Computation and Estimation
25	B	003	Measurement and Geometry
26	J	003	Measurement and Geometry
27	A	003	Measurement and Geometry
28	G	003	Measurement and Geometry
29	A	003	Measurement and Geometry
30	G	003	Measurement and Geometry
31	C	003	Measurement and Geometry
32	F	003	Measurement and Geometry
33	B	003	Measurement and Geometry
34	J	003	Measurement and Geometry
35	B	003	Measurement and Geometry
36	G	003	Measurement and Geometry
37	B	004	Probability and Statistics
38	J	004	Probability and Statistics
39	D	004	Probability and Statistics
40	H	004	Probability and Statistics
41	A	004	Probability and Statistics
42	H	004	Probability and Statistics
43	D	004	Probability and Statistics
44	H	005	Patterns, Functions, and Algebra
45	A	005	Patterns, Functions, and Algebra
46	G	005	Patterns, Functions, and Algebra
47	B	005	Patterns, Functions, and Algebra
48	H	005	Patterns, Functions, and Algebra
49	A	005	Patterns, Functions, and Algebra
50	H	005	Patterns, Functions, and Algebra

Grade 3 Math, Core 1

If you get this many items correct:		Then your converted scale score is:
0		000
1		084
2		129
3		156
4		176
5		192
6		205
7		216
8		226
9		236
10		244
11		252
12		260
13		267
14		274
15		280
16		287
17		293
18		299
19		304
20		310
21		316
22		321
23		327
24		332
25		338
26		343
27		349
28		354
29		360
30		366
31		371
32		377
33		383
34		389
35		396
36		**402**
37		409
38		416
39		424
40		432
41		440
42		450
43		460
44		471
45		485
46		**500**
47		520
48		547
49		592
50		600