

Measurement and Data

Set 3

Daily Practice Items and Answer Keys

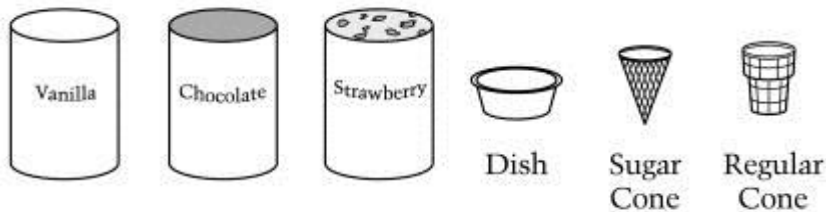
Day	Rainfall (in centimeters)
Sunday	0
Monday	0
Tuesday	6.3
Wednesday	0
Thursday	1.5
Friday	0.4
Saturday	0.5

1. The table shows how much rain fell on each day of a week in May. How much rain fell during that week?

- (A) 7.8 cm
- (B) 8.7 cm
- (C) 12.3 cm
- (D) 16.8 cm

2. In a gumball machine there are 100 red, 75 blue, 50 green, and 125 yellow gumballs. These 350 gumballs are mixed up. Sam puts money in and one gumball comes out. Which color is most likely to come out?

- (A) Red
- (B) Blue
- (C) Green
- (D) Yellow

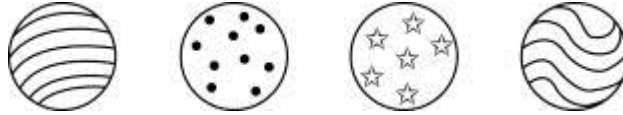


3. Jan’s Snack Shop has 3 flavors of ice cream – vanilla, chocolate, and strawberry.

The ice cream can be served in a dish, a sugar cone, or a regular cone.

There are 9 people who choose 1 dip of ice cream in a dish, or in a sugar cone, or in a regular cone, and all of their choices are different. List or show the 9 different choices.

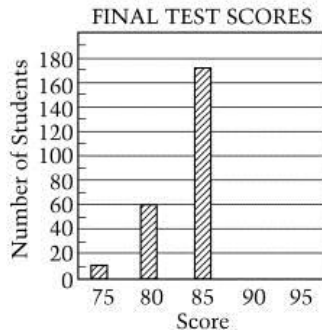
Could another person have a choice that is different from one of these 9 choices? Why or why not?



1. The balls in this picture are placed in a box and a child picks one without looking. What is the probability that the ball picked will be the one with dots?
- (A) 1 out of 4
 - (B) 1 out of 3
 - (C) 1 out of 2
 - (D) 3 out of 4

FINAL TEST SCORES	
Score	Number of Students
95	50
90	120
85	170
80	60
75	10

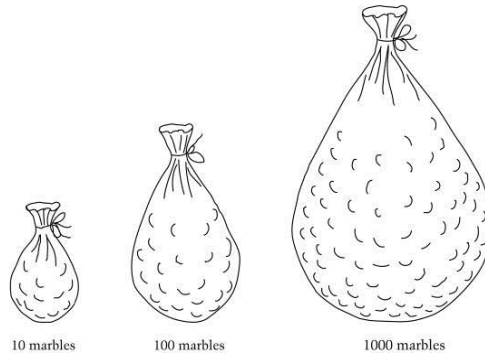
2. Use the information in the table above to complete the bar graph below.



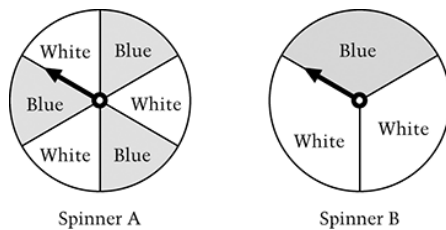
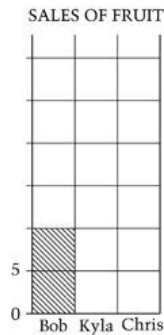
POINTS EARNED FROM SCHOOL EVENTS Class	Mathathon	Readathon
Mr. Lopez	425	411
Ms. Chen	328	456
Mrs. Green	447	342

3. What was the total number of points earned from the mathathon? Show all your work.

Answer: _____



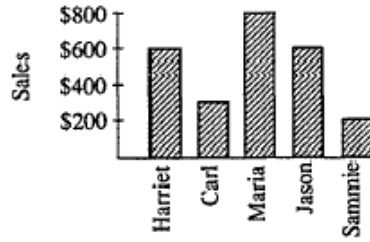
- There is only one red marble in each of the bags shown below. Without looking, you are to pick a marble out of one of the bags. Which bag would give you the greatest chance of picking the red marble?
 - (A) Bag with 10 marbles
 - (B) Bag with 100 marbles
 - (C) Bag with 1000 marbles
 - (D) It makes no difference
- In the school sale Bob sold 10 boxes of fruit, Kyla sold 20 boxes, and Chris sold 15 boxes. Complete the bar graph below to show how many boxes each student sold.



- Lori has a choice of two spinners. She wants the one that gives her a greater probability of landing on blue. Which spinner should she choose?
 - Spinner A
 - Spinner B

Explain why the spinner you chose gives Lori the greater probability of landing on blue.

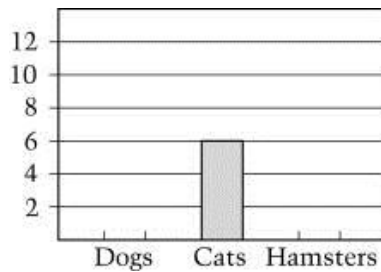
SALES FOR ONE MONTH



1. According to the graph above, which person's sales were closest to \$400 for the month?

- (A) Harriet
- (B) Carl
- (C) Jason
- (D) Sammie

2. Draw bars on the graph below so that the number of dogs is twice the number of cats and the number of hamsters is one-half the number of cats.



3. Steve was asked to pick two marbles from a bag of yellow marbles and blue marbles. One possible result was one yellow marble first and one blue marble second. He wrote this result in the table below. List all of the other possible results that Steve could get.

y stands for one yellow marble.

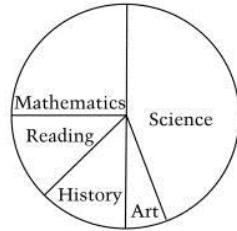
First
Marble

Second
Marble

b stands for one blue marble.

y

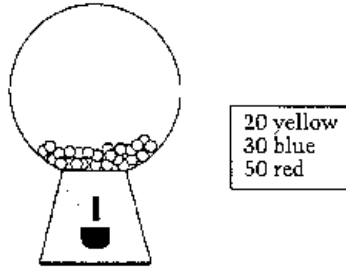
b



1. The pie chart above shows the portion of time Pat spent on homework in each subject last week. If Pat spent 2 hours on mathematics, about how many hours did Pat spend on homework altogether?

- (A) 4
(B) 8
(C) 12
(D) 16

Think carefully about the following question. Write a complete answer. You may use drawings, words, and numbers to explain your answer. Be sure to show all of your work.



2. The gumball machine has 100 gumballs; 20 are yellow, 30 are blue, and 50 are red. The gumballs are well mixed inside the machine.

Jenny gets 10 gumballs from this machine.

What is your best prediction of the number that will be red?

Answer: _____ gumballs

Explain why you chose this number.

3. There are 6 cubes of the same size in a jar.

2 cubes are yellow.

3 cubes are red.

1 cube is blue.

Chuck is going to pick one cube without looking. Which color is he most likely to pick?

What is the probability of this color being picked? _____

Standard: Foundational Application

1. B.

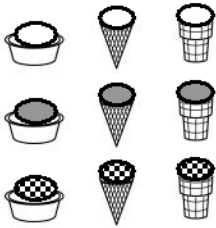
Standard: Foundational Application

2. D

Standard: Foundational Application**3. Solution:**

1. Dish, vanilla ice cream
2. Sugar cone, vanilla ice cream
3. Regular cone, vanilla ice cream
4. Dish, chocolate ice cream
5. Sugar cone, chocolate ice cream
6. Regular cone, chocolate ice cream
7. Dish, strawberry ice cream
8. Sugar cone, strawberry ice cream
9. Regular cone, strawberry ice cream

OR



No, these are the only ways to order 1 scoop with these flavors and containers.

OR

Yes, if they have two scoops, etc.

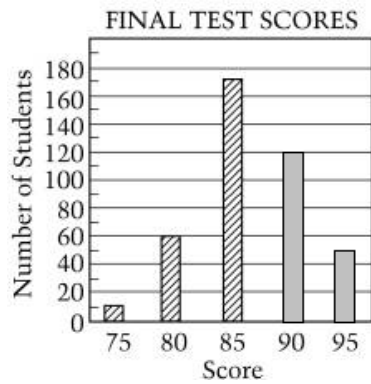
In this question the student needed to list the 9 different possible combinations of three flavors of ice cream served in three types of containers. The student also needed to recognize that these combinations were all the possible combinations of having one scoop of ice cream in a container. Determining a sample space is a prerequisite skill for the study of probability.

Standard: Foundational Application

1. A.

Standard: Foundational Application**2. Solution:**

Both bars drawn correctly. ("Line" bars are acceptable.)



In this question the student needed to read information presented in a table and complete a bar graph representing the given information. The student was first required to select the appropriate values from the table. Finally, the student needed to determine the correct height for the bars representing scores of 90 and 95 and draw the bars on the graph.

Standard: Foundational Application**3. Solution:**

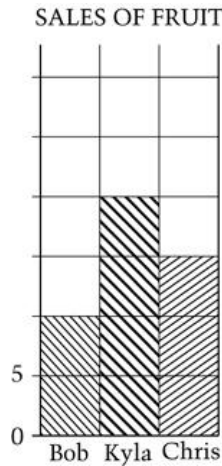
1,200 or 1200

Standard: Foundational Application

1. A.

Standard: Foundational Application

2. **Solution:**



Standard: Foundational Application

3. **Solution:**

A. The chance of landing on blue with Spinner A is $\frac{1}{2}$ of the time. With Spinner B it is $\frac{1}{3}$ of the time.

Standard: Foundational Application

1. B.

Standard: Foundational Application

2. **Solution:**

Both dog and hamsters correct.

Any type of shading bars is acceptable (no shading is also acceptable).

Top edge of hamsters should fall between 2 and 4 (anywhere) but not 2 or 4.

Note: Vertical lines that are the same length as the appropriate bars are acceptable.

Standard: Foundational Application

3. **Solution:**

yy, bb, by

All 3 outcomes listed.

(A correct pair can be repeated as long as all 3 correct pairs are given and no incorrect pair is included.)

Note: Repeating yb is incorrect,

Standard: Foundational Application

1. B.

Standard: Foundational Application**2. Solution:**

5 gumballs would probably be red. Half of the 100 gumballs in the machine are red, so it is reasonable to expect that since the gumballs are well mixed, approximately half of what Jenny gets out should be red.

Answers such as 4 or 6 are acceptable with a correct explanation.

A less correct explanation: There are more reds in the machine so more reds would come out.

Also acceptable:

5 because 10 percent of 50 is 5

(and 10 is 10 percent of 100)

5 because 50 divided by 10 is 5

In this question a student needed to make a prediction about the number of red gumballs Jenny would have received if she got 10 gumballs from the gum machine. Since the gumballs are well mixed and half of the gumballs in the machine are red, one would expect that half of what she got out be red. To receive full credit the student should have given an answer of 5 gumballs with an explanation that is equivalent to the preceding sentence.

Standard: Foundational Application**3. Solution:**

Red