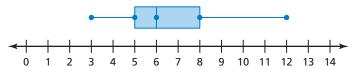
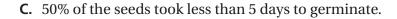
Standardized Test Practice

1. Research scientists are measuring the number of days lettuce seeds take to germinate. In a study, 500 seeds were planted. Of these, 473 seeds germinated. The box-and-whisker plot summarizes the number of days it took the seeds to germinate. What can you conclude from the box-and-whisker plot?



- **A.** The median number of days for the seeds to germinate is 12.
- **B.** 50% of the seeds took more than 8 days to germinate.



- **D.** The median number of days for the seeds to germinate was 6.
- **2.** An object dropped from a height will fall under the force of gravity. The time t, in seconds, it takes to fall a distance d, in feet, can be found using the formula below.

$$t = \frac{\sqrt{d}}{4}$$

A ball is dropped from the top of a building that is 40 feet tall. Approximately how many seconds will it take for the ball to reach the ground?

F. 1.6 sec

H. 5 sec

G. 3.2 sec

I. 6.3 sec

3. A plumber charges a fixed amount for a house call plus an amount based on the number of hours worked. A job lasting 1 hour costs \$95 and a job lasting 2 hours costs \$140. What is the fixed amount charged by the plumber?

A. \$45

C. \$70

B. \$50

D. \$95

Test-Taking Strategy Read Question Before Answering

Of 2048 cats, how many of them will

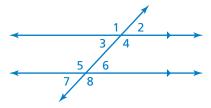
NOT answer to "Here, kitty kitty"?

"Be sure to read the question

choosing your answer. You may find a word that changes the meaning."

"free food"

4. The diagram below shows parallel lines cut by a transversal. Which angle is the corresponding angle for $\angle 6$?



F. ∠2

H. ∠4

G. ∠3

- **I.** ∠8
- **5.** Which value of *x* makes the equation below true?



$$3x - 9 = 2(x + 4)$$

6. As part of a probability experiment, students were asked to roll two number cubes and find the sum of the numbers obtained. One group of students did this 600 times and obtained the results shown in the table. Which sum was the mode for this group's 600 rolls?

Sum	2	3	4	5	6	7	8	9	10	11	12
Number of Rolls	16	30	51	66	83	98	93	64	47	35	17

A. 4

C. 12

B. 7

- **D.** 98
- **7.** Which expression is equivalent to $\frac{\sqrt{32}}{\sqrt{18}}$?
 - $\mathbf{F.} \ \ \sqrt{14}$

H. $\frac{8}{3}$

G. $\frac{4}{3}$

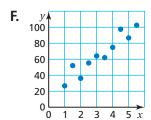
- 1. $\frac{16}{9}$
- **8.** Which point lies on the graph of the line given by $y = -\frac{1}{2}x + 7$?
 - **A.** (5, 4)

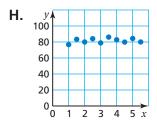
C. (20, 3)

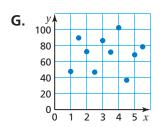
B. (-4, 5)

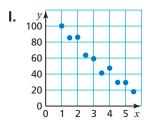
D. (40, -13)

9. Which scatter plot shows a negative relationship between *x* and *y*?









10. The legs of a right triangle have the lengths of 8 centimeters and15 centimeters. What is the length of the hypotenuse, in centimeters?



11. The 16 members of a camera club have the ages listed below.



 $40,\ 22,\ 24,\ 58,\ 30,\ 31,\ 37,\ 25,\ 62,\ 40,\ 39,\ 37,\ 28,\ 28,\ 51,\ 44$

 $\operatorname{Part} A$ Order the ages from least to greatest.

Part B Find the median of the ages.

Part C Make a box-and-whisker plot for the ages of the camera club members.

