

- 37 The mean exam score for 31 students in a geometry class was 79. The median exam score for the same set of students was 75. Two additional students took the exam at a later time and scored 65 and 93. How did the mean and median change when these two additional scores were included?
- A. The median increased and the mean stayed the same.
 - B. The median stayed the same and the mean increased.
 - C. The median and the mean both stayed the same.
 - D. The median and the mean increased.

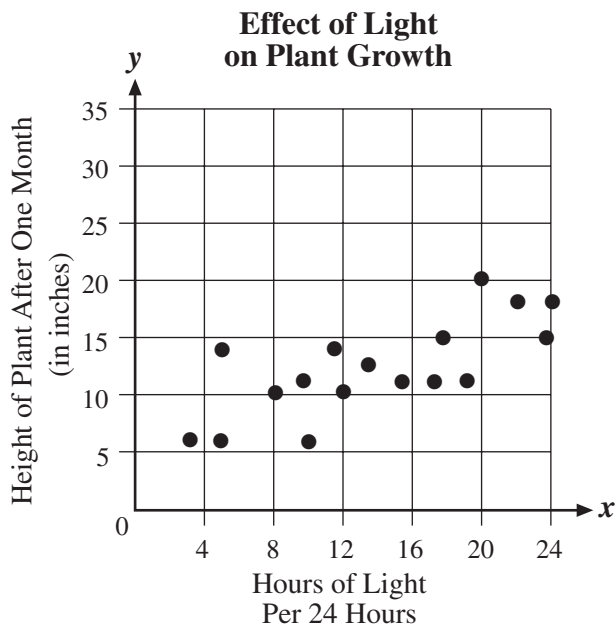
- 38 Julia and Marcia bought identically priced cans of chili and identically priced jars of salsa to make a dip.

- Julia bought 3 cans of chili and 2 jars of salsa for \$10.07.
- Marcia bought 2 cans of chili and 4 jars of salsa for \$12.98.

Which of the following systems of equations could be used to find x , the cost of one can of chili, and y , the cost of one jar of salsa?

- A. $x + y = 10.07$
 $x + y = 12.98$
- B. $10.07x + 12.98y = 11$
 $x + y = 11$
- C. $2x + 4y = 10.07$
 $2x + 3y = 12.98$
- D. $3x + 2y = 10.07$
 $2x + 4y = 12.98$

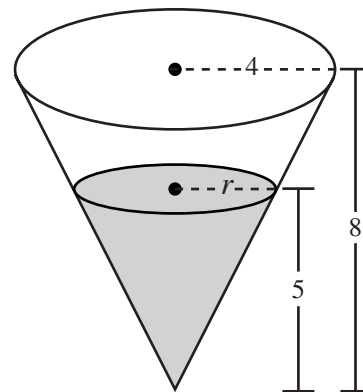
- 39 Jenny studied the effect of light on plant growth. She graphed a scatterplot to represent her data.



Which of the following **best** represents the equation for the line of best fit for the data shown?

- A. $y = -0.4x + 5$
- B. $y = 0.4x + 5$
- C. $y = -4x + 5$
- D. $y = 4x + 5$

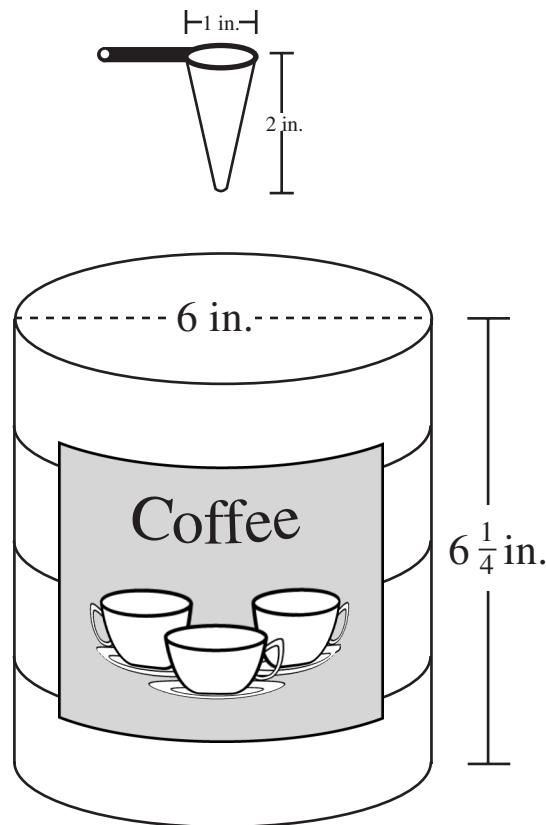
- 40 A cup in the shape of a cone has a height of 8 units and a radius of 4 units as shown in the figure below. The water in the cup reaches a height of 5 units.



What is the value of r , the radius of the surface of the water?

- A. 1.6 units
- B. 2.5 units
- C. 6.4 units
- D. 10.0 units

- 42 A can shaped like a right circular cylinder holds 2 pounds of coffee and has a diameter of 6 inches and a height of $6\frac{1}{4}$ inches.



- What is the total surface area of the coffee can? Show or explain how you obtained your answer.
- What is the volume of the can? Show or explain how you obtained your answer.
- A conical scoop is used to remove coffee from the can and place it into a coffee maker. The scoop has a 1-inch diameter and a 2-inch height. If one level scoop is used to make each cup of coffee, how many cups of coffee can be made from a full 2-pound can of coffee? Show or explain how you obtained your answer.