A printer produces posters at a constant rate of 42 posters per minute. At what rate, in posters per <u>hour</u>, does the printer produce the posters?

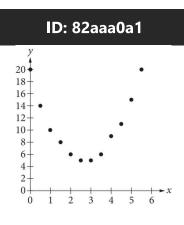
ID: 3f5398a6

For a person m miles from a flash of lightning, the length of the time interval from the moment the person sees the lightning to the moment the person hears the thunder is k seconds. The ratio of m to k can be estimated to be 1 to 5. According to this estimate, the person is how many miles from a flash of lightning if the time interval is 25 seconds?

A. 10

- B. 9
- C. 6

D. 5



Of the following, which is the best model for the data in the scatterplot?

A. $y = 2x^{2} - 11x - 20$ B. $y = 2x^{2} - 11x + 20$ C. $y = 2x^{2} - 5x - 3$ D. $y = 2x^{2} - 5x + 3$

ID: 000259aa

A group of monarch butterflies migrated from Chicago, Illinois, to Michoacán, Mexico, flying a total of 2,100 miles. It took a single butterfly in the group 120 days to travel this route one way. On average, how many miles did the butterfly travel per day?

- A. 0.057
- B. 0.729
- C. 17.5
- D. 24

In a box of pens, the ratio of black pens to red pens is **8** to **1**. There are **40** black pens in the box. How many red pens are in the box?

- A. 5
- B. **8**
- C. **40**
- D. **320**

ID: 90eed2e5

A city has 50 city council members. A reporter polled a random sample of 20 city council members and found that 6 of those polled supported a specific bill. Based on the sample, which of the following is the best estimate of the number of city council members in the city who support the bill?

A. 6

- B. 9
- C. 15

D. 30

A wind turbine completes **900** revolutions in **50** minutes. At this rate, how many revolutions per minute does this turbine complete?

- A. 18
- B. **850**
- C. 950
- D. 1,400

ID: c88e0663

For a school fund-raiser, 10 students sold a total of 90 boxes of cookies. Which of the following can be calculated from this information?

- A. The average number of boxes sold per student
- B. The median number of boxes sold per student
- C. The greatest number of boxes sold by one student
- D. The least number of boxes sold by one student

What percentage of **300** is **75**?

- A. 25%
- В. **50%**
- C. **75%**
- D. **225%**

A special camera is used for underwater ocean research. When the camera is at a depth of **58** fathoms, what is the camera's depth in <u>feet</u>? (1 fathom = 6 feet)

ID: e7d9649f

A random sample of 50 people from a town with a population of 14,878 were asked to name their favorite flavor of ice cream. If 7 people in the sample named chocolate as their favorite ice-cream flavor, about how many people in the town would be expected to name chocolate?

A. 350

B. 2,100

C. 7,500

D. 10,500