

## Lesson 10 Practice Problems

1. Estimate the side length of a square that has a 9 cm long diagonal.
  
2. Select **all** quantities that are proportional to the diagonal length of a square.
  - A. Area of the square
  - B. Perimeter of the square
  - C. Side length of the square
  
3. Diego made a graph of two quantities that he measured and said, "The points all lie on a line except one, which is a little bit above the line. This means that the quantities can't be proportional." Do you agree with Diego? Explain.
  
4. The graph shows that while it was being filled, the amount of water in gallons in a swimming pool was approximately proportional to the time that has passed in minutes.

- a. About how much water was in the pool after 25 minutes?
- b. Approximately when were there 500 gallons of water in the pool?
- c. Estimate the constant of proportionality for the gallons of water per minute going into the pool.

