Lesson 14 Practice Problems

1. Evaluate each expression. Use scientific notation to express your answer.

   a. $(1.5 \times 10^{2})(5 \times 10^{10})$

   b. $\frac{4.8 \times 10^{-8}}{3 \times 10^{-3}}$

   c. $(5 \times 10^{8})(4 \times 10^{3})$

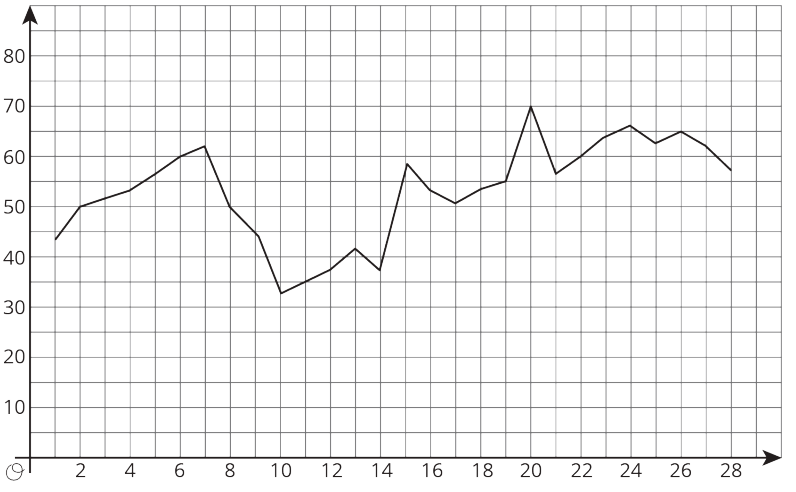
   d. $(7.2 \times 10^{3}) \div (1.2 \times 10^{5})$

2. How many bucketloads would it take to bucket out the world's oceans? Write your answer in scientific notation.

   Some useful information:

   - The world's oceans hold roughly 1.4×10^{9} cubic kilometers of water.
   - A typical bucket holds roughly 20,000 cubic centimeters of water.
   - There are 10^{15} cubic centimeters in a cubic kilometer.

3. The graph represents the closing price per share of stock for a company each day for 28 days.



   a. What variable is represented on the horizontal axis?

   b. In the first week, was the stock price generally increasing or decreasing?

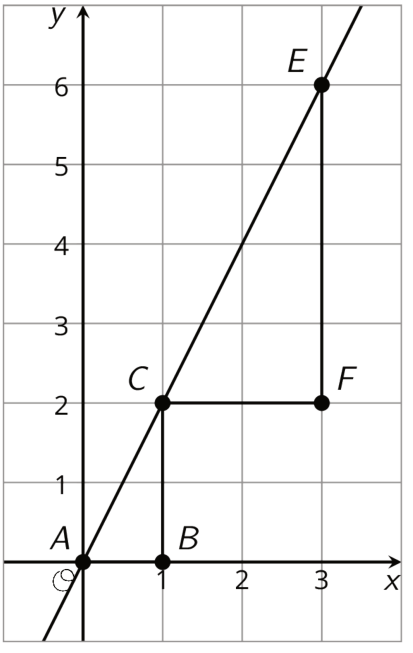
   c. During which period did the closing price of the stock decrease for at least 3 days in a row?

(From Unit 5, Lesson 5.)

4. Write an equation for the line that passes through $(-8.5, 11)$ and $(5, -2.5)$.

(From Unit 3, Lesson 11.)

5. Explain why triangle ABC is similar to triangle CFE.



(From Unit 2, Lesson 6.)