Problem Solving

9-6  Multiplying Integers

Write the correct answer.

1. The coldest temperature ever recorded in Rhode Island was 25°F below zero. Though Nevada lies much farther south, its coldest temperature was twice as cold as Rhode Island’s. What was Nevada’s record cold temperature?

2. Tom and Kim made up a game in which black tiles equal +5 points each, and red tiles equal −3 points each. The person with the most points wins. At the end of the game Tom had 6 red tiles and 4 black tiles, and Kim had 4 red tiles and 3 black tiles. Who won?

3. During a month-long drought, the amount of water in the family’s well changed −4 gallons a day. How much did the amount of water in the well change after one week?

4. Sperm whales dive deeper than any other mammals. They regularly dive to 3,937 feet below sea level. But they sometimes dive to twice this depth! To what elevation can sperm whales dive?

5. On Monday morning, the value of LCM stock was $15 a share. Then the value of the stock changed by −3 dollars a day for 4 days in a row. What was the value of one share of LCM stock after the fourth day?

6. Lake Manitoba and Lake Winnipeg are two of the largest lakes in Canada. The greatest depth of Lake Manitoba is 12 feet. Lake Winnipeg is 5 times deeper than Lake Manitoba. What is the greatest depth of Lake Winnipeg?

Circle the letter of the best answer.

7. Which addition expression could be used to check the product of 5 • (−3)?
   A  5 + 5 + 5
   B  −3 + (−3) + (−3)
   C  5 + 5 + 5 + 5 + 5
   D  −3 + (−3) + (−3) + (−3) + (−3)

8. Which property allows you to rewrite −2 • (−4) as −4 • (−2)?
   F  Commutative Property
   G  Distributive Property
   H  Integer Property
   J  Associative Property