

Problem Set

1. Write an integer to match the following descriptions.
 - a. A debit of \$40 _____
 - b. A deposit of \$225 _____
 - c. 14,000 feet above sea level _____
 - d. A temperature increase of 40°F _____
 - e. A withdrawal of \$225 _____
 - f. 14,000 feet below sea level _____

For Problems 2–4, read each statement about a real-world situation and the two related statements in parts (a) and (b) carefully. Circle the correct way to describe each real-world situation; *possible answers include either (a), (b), or both (a) and (b)*.

2. A whale is 600 feet below the surface of the ocean.
 - a. The depth of the whale is 600 feet from the ocean's surface.
 - b. The whale is -600 feet below the surface of the ocean.
3. The elevation of the bottom of an iceberg with respect to sea level is given as -125 feet.
 - a. The iceberg is 125 feet above sea level.
 - b. The iceberg is 125 feet below sea level.
4. Alex's body temperature decreased by 2°F .
 - a. Alex's body temperature dropped 2°F .
 - b. The integer -2 represents the change in Alex's body temperature in degrees Fahrenheit.
5. A credit of \$35 and a debit of \$40 are applied to your bank account.
 - a. What is an appropriate scale to graph a credit of \$35 and a debit of \$40? Explain your reasoning.
 - b. What integer represents "a credit of \$35" if zero represents the original balance? Explain.
 - c. What integer describes "a debit of \$40" if zero represents the original balance? Explain.
 - d. Based on your scale, describe the location of both integers on the number line.
 - e. What does zero represent in this situation?