

**Problem Set**

For each of the following two quantities in Problems 1–4, which has the greater magnitude? (Use absolute value to defend your answers.)

1. 33 dollars and  $-52$  dollars
2.  $-14$  feet and 23 feet
3.  $-24.6$  pounds and  $-24.58$  pounds
4.  $-11\frac{1}{4}$  degrees and 11 degrees

For Problems 5–7, answer true or false. If false, explain why.

5. The absolute value of a negative number will always be a positive number.
6. The absolute value of any number will always be a positive number.
7. Positive numbers will always have a higher absolute value than negative numbers.
8. Write a word problem whose solution is  $|20| = 20$ .
9. Write a word problem whose solution is  $|-70| = 70$ .
10. Look at the bank account transactions listed below and determine which has the greatest impact on the account balance. Explain.
  - a. A withdrawal of \$60.
  - b. A deposit of \$55.
  - c. A withdrawal of \$58.50.