Lesson 11: Absolute Value—Magnitude and Distance

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.

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