Absolute Value Thinkers

Name _____   Period _____

Evaluate each expression:

1) $|-9| =$

2) $|-8| + |4| =$

2) $|-13| - |3| =$

4) $4|-3| =$

5) $|15 - 7| - |4 - 7| =$

6) $-|-5| + |6| =$

7) The average temperature of Saturn is -218°F while the average temperature of Jupiter is -162°F. Which planet has the lower average temperature? Explain.

8) Determine whether each statement is SOMETIMES, ALWAYS, or NEVER true. Explain.

a) $|x| = |-x|$ Sometimes   Always   Never

Why? _____

b) $|x| = -|x|$ Sometimes   Always   Never

Why? _____

c) $|-x| = -|x|$ Sometimes   Always   Never

Why? _____

9) What values of x make the statement $|x| = 7$ true?