

hw-07a-absolute-value-equations

Due: 12/12/2015 at 06:00am EST.

Students will be able to:

- Solve Absolute Value Equations

Functions and symbols that WeBWorK understands.

Links to some useful WeBWorK pages for students

1. (1 pt)

Solve for x : $|x| = 54$

Please enter the smaller answer first.

Answer: $x =$ _____, _____

2. (1 pt)

Solve for x : $|x - 19| = 20$

Please enter the smaller answer first.

Answer: $x =$ _____, _____

3. (1 pt) Solve the following equation.

$$|3x + 2| = 2$$

Answer: _____

Note: If there is more than one answer, write them separated by commas (e.g., 1, 2).

4. (1 pt) Solve the following equation.

$$|-7x + 10| + 9 = 10$$

Answer: _____

Note: If there is more than one answer, write them separated by commas (e.g., 1, 2).

5. (1 pt) Solve the following equation.

$$|1x + 8| = |9x - 9|$$

Answer: _____

Note: If there is more than one answer, write them separated by commas (e.g., 1, 2).

6. (1 pt) Solve the following equation.

$$|2x + 4| = 5$$

Answer: _____

Note: If there is more than one answer, write them separated by commas (e.g., 1, 2).

7. (1 pt)

Solve for x : $|40 - x| = 12$

Please enter the smaller answer first.

Answer: $x =$ _____, _____

8. (1 pt) Match the statements in the lefthand column with their equivalent statements in the righthand column.

- ___ 1. $|x - 5| < \infty$
- ___ 2. $|x - 5| < 7$
- ___ 3. $|x - 5| > 7$
- ___ 4. $|x - 5| = 7$
- ___ 5. $|x - 5| \leq 7$

- A. $x \in [-2, 12]$
- B. $x \in \{-2, 12\}$
- C. $x \in (-\infty, \infty)$
- D. $x \in (-2, 12)$
- E. $x \in (-\infty, -2) \cup (12, \infty)$