

## Section 2-14 : Absolute Value Equations

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For problems 1 – 5 solve each of the equation.

$$1. |4p - 7| = 3$$

$$2. |2 - 4x| = 1$$

$$3. 6u = |1 + 3u|$$

$$4. |2x - 3| = 4 - x$$

$$5. \left| \frac{1}{2}z + 4 \right| = |4z - 6|$$

For problems 6 & 7 find all the real valued solutions to the equation.

$$6. |x^2 + 2x| = 15$$

$$7. |x^2 + 4| = 1$$

## Section 2-15 : Absolute Value Inequalities

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Solve each of the following inequalities.

$$1. |4t + 9| < 3$$

$$2. |6 - 5x| \leq 10$$

$$3. |12x + 1| \leq -9$$

$$4. |2w - 1| < 1$$

$$5. |2z - 7| > 1$$

$$6. |10 - 3w| \geq 4$$

$$7. |4 - 3z| > 7$$