## **EXTRA PRACTICE** — Exercises

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## Unit II – First Degree Relations with One Placeholder Part D – Systems of Equations and Inequalities Lesson 5 – Absolute Value Greater Than a Non-Negative Number (or)

Find the solution set for each of the following absolute value relations and show the solution set on a number line and in set notation.

- 1. |2x-3| > 7
- 2.  $-3|x+1| \le -15$
- 3.  $2|x-3| \ge 4$
- $4. \qquad \left|\frac{2p-7}{3}\right| > 1$
- $5. \qquad \left|\frac{3}{2}x+6\right| \ge 3$
- $6 \qquad |3x-4| > 2$
- 7. 14 < |4n-2|
- 8. 16 < |2x+3| + 9
- 9.  $|4n-5|-18\geq^{-3}$
- 10.  $2 \le |x-1| \le 5$

## **EXTRA PRACTICE** — Answer Key

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## Unit II – First Deg ree Relations with One Placeholder Part D – Systems of Equations and Inequalities Lesson 5 – Absolute Value Greater Than a Non-Negative Number (or)

Find the solution set for each of the following absolute value relations and show the solution set on a number line and in set notation.

1. 
$$S = \{x \mid x < 2 \text{ or } x > 5\}$$

2.  $S = \{x \mid x \leq 6 \text{ or } x \geq 4\}$ 

3.  $S = \{x \mid x \leq 1 \text{ or } x \geq 5\}$ 

4.  $S = \{p \mid p < 2 \text{ or } p > 5\}$ 

5.  $S = \{x \mid x \leq 6 \text{ or } x \geq 2\}$ 

6.  $S = \{x \mid x \leq 6 \text{ or } x \geq 2\}$ 

7.  $S = \{x \mid x \leq 6 \text{ or } x \geq 2\}$ 

7.  $S = \{n \mid n < 3 \text{ or } n > 4\}$ 

8.  $S = \{x \mid x \leq 5 \text{ or } x \geq 2\}$ 

9.  $S = \{x \mid x \leq 1 \text{ or } x \geq 3 \text{ and } x \geq 74 \text{ and } x \leq 6\}$ 

10.  $S = \{x \mid x \leq 1 \text{ or } x \geq 3 \text{ and } x \geq 74 \text{ and } x \leq 6\}$