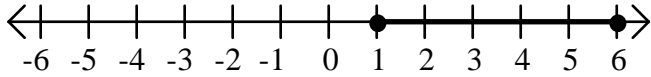


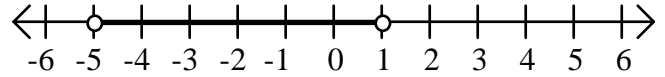
Algebra I Worksheet #7 Unit 4 selected solutions

Solve each of the following . Graph the solution set on the number line provided.

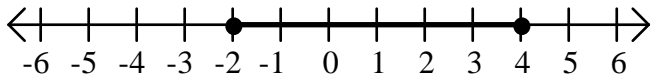
$$\begin{aligned} 2. \quad & -6 \leq 3x - 9 \leq 9 \\ & 3 \leq 3x \leq 18 \\ & 1 \leq x \leq 6 \end{aligned}$$



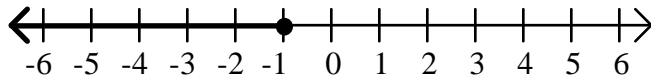
$$\begin{aligned} 4. \quad & -1 < 1 - 2x < 11 \\ & -2 < -2x < 10 \\ & 1 > x > -5 \\ & -5 < x < 1 \end{aligned}$$



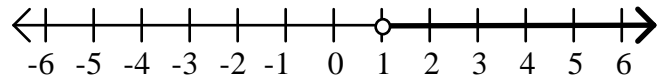
$$\begin{aligned} 6. \quad & -15 \leq 6x - 3 \leq 21 \\ & -12 \leq 6x \leq 24 \\ & -2 \leq x \leq 4 \end{aligned}$$



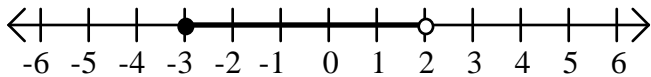
$$\begin{aligned} 8. \quad & 4x - 5 \leq 11 \quad \text{and} \quad 3x + 7 \leq 4 \\ & 4x \leq 16 \quad \quad \quad 3x \leq -3 \\ & x \leq 4 \quad \text{and} \quad x \leq -1 \\ & \quad \quad \quad x \leq -1 \end{aligned}$$



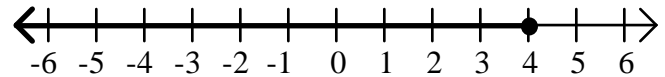
$$\begin{aligned} 10. \quad & -5x - 8 < 7 \quad \text{and} \quad 2x + 3 > 5 \\ & -5x < 15 \quad \quad \quad 2x > 2 \\ & x > -3 \quad \text{and} \quad x > 1 \\ & \quad \quad \quad x > 1 \end{aligned}$$



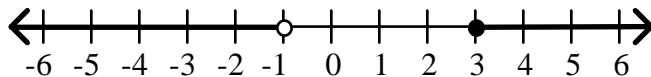
$$\begin{aligned} 12. \quad & 6x - 5 < 7 \quad \text{and} \quad 4x + 12 \geq 0 \\ & 6x < 12 \quad \quad \quad 4x \geq -12 \\ & x < 2 \quad \text{and} \quad x \geq -3 \\ & -3 \leq x < 2 \end{aligned}$$



$$\begin{aligned} 14. \quad & -5x - 7 \geq 8 \quad \text{or} \quad 2x + 3 \leq 11 \\ & -5x \geq 15 \quad \quad \quad 2x \leq 8 \\ & x \leq -3 \quad \text{or} \quad x \leq 4 \\ & \quad \quad \quad x \leq 4 \end{aligned}$$



$$\begin{aligned} 16. \quad & 3x + 5 < 2 \quad \text{or} \quad 5x - 12 \geq 3 \\ & 3x < -3 \quad \quad \quad 5x \geq 15 \\ & x < -1 \quad \text{or} \quad x \geq 3 \end{aligned}$$



$$\begin{aligned} 18. \quad & 1 - 3x \geq 10 \quad \text{or} \quad 2x + 1 > 9 \\ & -3x \geq 9 \quad \quad \quad 2x > 8 \\ & x \leq -3 \quad \text{or} \quad x > 4 \end{aligned}$$

