

Name _____

Multi-Step Inequalities

Solve the inequality.

1. $2n - 8n \leq 24$

2. $k - 3 - 9 \leq -14$

3. $3k + 7k > -80$

4. $p - 3 + 2p \leq 15$

5. $8n - 6 - n > -6$

6. $-19 + 3a > 7a + 1$

7. $4v - 23v < -3v - 8$

8. $-15 - 3x - 4x \geq x - 7x$

9. $3x + 18 \geq 6x + 3$

10. $14 + 5n > 4n + 10$

11. $40 + a < 6a - 10$

12. $-4n + 28 > 1 - n$

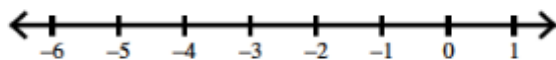
$$13. 8k - 12 < -20 + 7k$$

$$14. 6x + 6 > 5 + 5x$$

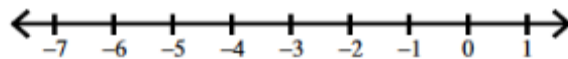
$$15. 19 + 4n + 2 - 6n > n - 6$$

Solve the inequality and graph the solution on the number line.

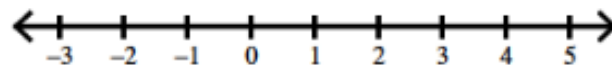
$$16. 7 + 5p < 1 + 3p$$



$$17. 7 + 5m \leq m - 1$$



$$18. -11 - 6n < -(n + 11)$$



Multi-Step Inequalities Answers

Solve the inequality.

1. $2n - 8n \leq 24$

$$n \geq -4$$

2. $k - 3 - 9 \leq -14$

$$k \leq -2$$

3. $3k + 7k > -80$

$$k > -8$$

4. $p - 3 + 2p \leq 15$

$$p \leq 6$$

5. $8n - 6 - n > -6$

$$n > 0$$

6. $-19 + 3a > 7a + 1$

$$a < -5$$

7. $4v - 23v < -3v - 8$

$$v > \frac{1}{2}$$

8. $-15 - 3x - 4x \geq x - 7x$

$$x \leq -15$$

9. $3x + 18 \geq 6x + 3$

$$x \leq 5$$

10. $14 + 5n > 4n + 10$

$$n > -4$$

11. $40 + a < 6a - 10$

$$a > 10$$

12. $-4n + 28 > 1 - n$

$$n < 9$$

$$13. 8k - 12 < -20 + 7k$$

$$k < -8$$

$$14. 6x + 6 > 5 + 5x$$

$$x > -1$$

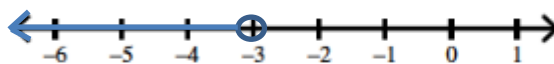
$$15. 19 + 4n + 2 - 6n > n - 6$$

$$n < 9$$

Solve the inequality and graph the solution on the number line.

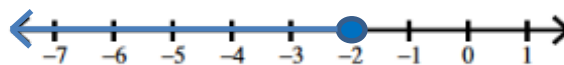
$$16. 7 + 5p < 1 + 3p$$

$$p < -3$$



$$17. 7 + 5m \leq m - 1$$

$$m \leq -2$$



$$18. -11 - 6n < -(n + 11)$$

$$n > 0$$

