Name: _____

Solving Inequalities (One-Step)

Reminder: When solving inequalities, you have to reverse the direction of the inequality sigh whenever you:

- Swap the positions of the left side of the inequality with the right side of the inequality.
  Example: $4 < x \rightarrow x > 4$
- Multiply or divide both sides of the inequality by a **negative** number.
  Example: $-2y \geq 8 \rightarrow y \leq -4$

Directions: Solve each inequality.

1.) $x + 7 > -14$

2.) $-8m \leq -56$

3.) $-9 > x - 5$

4.) $-6 + r \geq 8$

5.) $4 + v \leq -12$

6.) $-10x \leq 100$

7.) $2 \geq 2m$

8.) $-a \leq 9$

9.) $\frac{g}{4} > 11$

10.) $25x \leq -50$

11.) $\frac{c}{-8} \geq 8$

12.) $0 > 6p$

13.) $\frac{c}{-2} \leq 10$

14.) $-3 \leq y - 4$

15.) $-12x > 84$

16.) $-8x \leq -80$

ANSWER KEY

1.) $x + 7 > -14$

$\boldsymbol{x > -21}$

2.) $-8m \leq -56$

$\boldsymbol{m \geq 7}$

3.) $-9 > x - 5$

$\boldsymbol{x < -4}$

4.) $-6 + r \geq 8$

$\boldsymbol{r \geq 14}$

5.) $4 + v \leq -12$

$\boldsymbol{v \leq -16}$

6.) $-10x \leq 100$

$\boldsymbol{x \geq -10}$

7.) $2 \geq 2m$

$\boldsymbol{m \leq 1}$

8.) $-a \leq 9$

$\boldsymbol{a \geq -9}$

9.) $\frac{g}{4} > 11$

$\boldsymbol{g > 44}$

10.) $25x \leq -50$

$\boldsymbol{x \leq -2}$

11.) $\frac{c}{-8} \geq 8$

$\boldsymbol{x \leq -64}$

12.) $0 > 6p$

$\boldsymbol{p < 0}$

13.) $\frac{c}{-2} \leq 10$

$\boldsymbol{c \geq -20}$

14.) $-3 \leq y - 4$

$\boldsymbol{y \geq 1}$

15.) $-12x > 84$

$\boldsymbol{x < -7}$

16.) $-8x \leq -80$

$\boldsymbol{x \geq 10}$