Name: _____

Solving Two-Step Inequalities

Solving inequalities follows the same procedure as solving equations **except** when multiplying or dividing by a negative integer, the inequality symbol flips.

example:

$$5x > 8x + 27$$
$$\underline{-8x \quad -8x}$$
$$-3x > 27$$
$$\underline{-3 \quad\quad -3}$$
$$\boxed{x < -9}$$

$$4x + 3 < -1$$
$$\underline{-3 \quad -3}$$
$$4x < -4$$
$$\underline{4 \quad\quad 4}$$
$$\boxed{x < -1}$$

_____

_____

3. $-4b - 4 < 8$

4. $-3a + 5 \leq -16$

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Solving Two-Step Inequalities

5. $6x - 19 > 5$

6. $-9y - 11 \leq 16$

9. $2x - 5 \geq 7$

10. $9y - 3 > 6$

Solving Two-Step Inequalities

1. $5y - 3 > -18$

$\underline{+\ 3+\ 3}$

$\dfrac{5y}{5} > \dfrac{-15}{5}$

2. $3x + 11 \geq 5$

$\underline{-\ 11\ -\ 11}$

$\dfrac{3x}{3} \geq \dfrac{-6}{3}$

$\dfrac{2x}{2} \geq \dfrac{12}{2}$

$\dfrac{9y}{9} > \dfrac{9}{9}$

$x \geq 6$

$y > 1$