

# Solving for x: Lesson 10

## Linear Inequalities: Worksheet 1

Name: \_\_\_\_\_



Predict if you will need to flip the inequality sign - Yes (flip) or No (no flip):

$$5z > -20 \quad \underline{\hspace{2cm}} \qquad \frac{-4}{5}c - 2 \leq 10 \quad \underline{\hspace{2cm}}$$

$$\frac{x}{7} \leq 4 \quad \underline{\hspace{2cm}} \qquad 2d + 8 > 14 \quad \underline{\hspace{2cm}}$$

$$-f \geq 11 \quad \underline{\hspace{2cm}} \qquad g + 3 < 9 \quad \underline{\hspace{2cm}}$$

Solve using excellent algebra:

$$\frac{-1}{3}y \geq 5$$

$$w + 7 < 10$$

$$2d + 8 > 14$$

$$-5x - 6 \leq 14$$

$$-4a + 3 \geq a + 8$$

$$20 + 5b < -2b - 1$$

$$-3(h-7)+5h-11 \geq 5(-h+4)+h+2$$

**Challenge!**

$$\frac{-5}{8}(x-16) + \frac{3}{4}x - 2 < \frac{1}{2}(x+10)+5$$