

### 9.3 Warm Up

1. Solve each inequality.

a)  $-3x > 39$

When dividing or multiplying by a negative number, reverse the inequality sign.

b)  $\frac{y}{7} \leq 20$

2. Solve each equation. Verify your answer.

a)  $-5x - 7 = 18$

$-5x - 7 + \underline{\hspace{2cm}} = 18 + \underline{\hspace{2cm}}$

$$\begin{array}{r} -5x = \underline{\hspace{2cm}} \\ \hline \boxed{\hspace{2cm}} \\ \hline \boxed{\hspace{2cm}} \end{array}$$

$x = \underline{\hspace{2cm}}$

Check:

Left Side	Right Side
$-5x - 7$	18

b)  $\frac{x}{2} + 5 = 11$

Subtract 5.

Multiply by 2.

Check:

Left Side	Right Side

3. Use the distributive property to solve each equation.

a)  $6(x + 3) = 30$

$6x + 6(3) = 30$

$6x + \underline{\hspace{2cm}} = 30$

$6x + \underline{\hspace{2cm}} - \underline{\hspace{2cm}} = 30 - \underline{\hspace{2cm}}$

$$\begin{array}{r} 6x = \underline{\hspace{2cm}} \\ \hline \boxed{\hspace{2cm}} \\ \hline \boxed{\hspace{2cm}} \end{array}$$

$x = \underline{\hspace{2cm}}$

b)  $-2(x - 4) = 18$