



Monday Warm Up

March 26, 2012

$$\frac{1}{4}(x-7) - 4 \leq \frac{1}{2}(5x+4)$$

$$1(x-7) - 16 \leq \frac{4}{2}(5x+4)$$

$$x - 7 - 16 \leq 2(5x+4)$$

$$x - 23 \leq 10x + 8$$

$$x \leq 10x + 8 + 23 \quad x \geq -3.443$$

$$x \leq 10x + 31$$

$$1x - 10x \leq 31$$

$$-9x \leq 31$$

$$\div -9 \quad \div -9 \quad \frac{31}{-9} \quad x \geq \frac{31}{-9}$$



X = #

METHOD 1)

$$\frac{1}{4}(x - 7) - 4 \leq \frac{1}{2}(5x + 4)$$

$$\frac{1x}{4} - \frac{7}{4} - 4 \leq \frac{5x}{2} + \frac{4}{2}$$

$$\frac{1x}{4} - \frac{7}{4} - 4 \leq \frac{5x}{2} + \frac{4}{2}$$

$$\frac{4x}{4} - \frac{28}{4} - 16 \leq \frac{20x}{2} + \frac{16}{2}$$

$$x - 7 - 16 \leq 10x + 8$$

$$x - 23 \leq 10x + 8$$

$$x - 23 \leq 10x + 8$$

$$-9x - 23 \leq 8$$

$$-9x - 23 \leq 8$$

$$-9x \leq 31$$

$$\frac{-9x}{-9} \leq \frac{31}{-9}$$

Switch

$$x \geq \frac{-31}{9}$$

METHOD 2)

$$\frac{1}{4} (x - 7) - 4 \leq \frac{1}{2} (5x + 4)$$

$$\frac{4}{4} (x - 7) - 16 \leq \frac{4}{2} (5x + 4)$$

$$1 (x - 7) - 16 \leq 2 (5x + 4)$$

$$x - 7 - 16 \leq 10x + 8$$

$$x - 23 \leq 10x + 8$$

$$x - 23 \leq 10x + 8$$

$$-9x - 23 \leq 8$$

$$-9x - 23 \leq 8$$

$$-9x \leq 31$$

$$\frac{-9x}{-9} \leq \frac{31}{-9}$$

Switch

$$x \geq \frac{-31}{9}$$