

Solving Multi-step inequalities:

$$\begin{aligned}
 3a - 2(6a - 4) &> 4 - (4a + 6) \\
 \underline{3a - 12a} + 8 &> \underline{4 - 4a + (-6)} \\
 -9a + 8 &> -2 - 4a \\
 -9a + 4a + 8 &> -2 - 4a + 4a \\
 -5a + 8 &> -2 \\
 -5a + 8 - 8 &> -2 - 8 \\
 \underline{-5a} &> \underline{-10} \\
 \underline{-5} & \quad \underline{-5} \\
 a &< 2
 \end{aligned}$$

original problem  
 distributive property  
 combine like terms  
 put a's together  
 combine like terms  
 -8 from both sides  
 Simplify  
 $\div -5$   
 woo-hoo!! 😊 🧐

$$\begin{aligned}
 1. \quad & 2(t+3) \geq 16 \\
 & 2t + 6 \geq 16 \\
 & \quad -6 \quad -6 \\
 & \frac{2t}{2} \geq \frac{10}{2} \\
 & t \geq 5
 \end{aligned}
 \quad \text{if } 2.$$

Homework: Handout pages 21-22 all  
 all work done on a properly  
 headed, loose leaf sheet of paper.