



Linear Inequalities

Solve each inequality. Show all work.

$$1. \quad \frac{4}{9}(18x - 36) \geq -272$$

$$2. \quad \frac{3}{5}\left(\frac{5}{3}x - 10\right) \geq -\frac{15}{2}$$

$$3. \quad \frac{1}{2}(4x + 8) + \frac{1}{3}(36x + 18) \leq \frac{4}{5}(10x + 15) + \frac{2}{7}(7x)$$

$$4. \quad 5(2x - 3) \leq -10$$

$$5. \quad 3(-4x - 2) - 2(-2x - 5) \leq -2(4x + 3) - 3(-4x + 2)$$

6. $\frac{4}{5}(10x + 25) \geq 4$

7. $-7(2x + 1) - 4(3x - 2) \leq -3(2x - 4) - 2(9x + 4)$

8. $-5(x + 3) \leq 4x + 3$

9. $6(x + 4) - 2(2x + 3) \geq 4(x - 5) - 3(x - 2)$

10. $6(x - 3) \geq -10$