Solve the following inequalities for x, then graph the solution on the number line.

1. $3x - 5 < -2$

2. $4x + 3 > -7$

3. $2x + 11 \leq 5x - 10$

4. $4x - 3 \geq -5x + 12$

5. $\dfrac{3x}{2} - 3 \leq 2x - 1$

6. $2(x - 3) < 4(2 + x) - 2x$

7. $5(4x - 1) \geq \dfrac{5}{7}(2x + 3)$

8. $2(1 - x) + 4x < 20 - x$

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

10. $\dfrac{x}{2} + \dfrac{5}{3} < \dfrac{x}{12} + x$

11. $\dfrac{1}{3}\left(\dfrac{9}{2} - x\right) \geq 0$

12. $x(x - 4) + 2x < (x + 1)^2$

Don't forget to graph the solution, too.

1. $x < 1$ **2.** $x > -\dfrac{5}{2}$ **3.** $x \geq 7$ **4.** $x \geq \dfrac{5}{3}$ **5.** $x \geq -4$ **6.** All real numbers

7. $x \geq \dfrac{5}{13}$ **8.** $x < 6$ **9.** No Solution   **10.** $x > \dfrac{20}{7}$ **11.** $x \leq \dfrac{9}{2}$ **12.** $x > -\dfrac{1}{4}$.

HW: Section 1.1, p. 63: #31, 33, 34, 35, 37, 38, 39, 41, 59, 63, 65