**Algebra Review #38** ***SHOW HOW YOU SOLVED EACH PROBLEM***

**NAME** _____

1.
Solve each:

| $(x + 4)(x - 20)$ | $(4x - 3)(5x + 4)$ |
|---|---|
| | |

2. Factor each:

| $x^2 - 9x + 20$ | $2x^2 + 16x + 30$ |
|---|---|
| | |

3. Solve the following for a:

$$\frac{2a}{3} = 8 + 4a$$

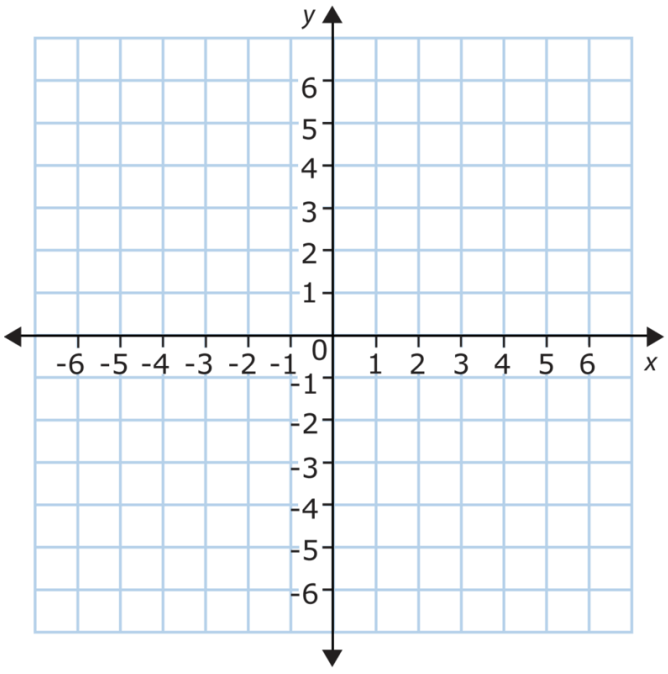
4. Find the mistake in the problem, circle it, and then fix the work:

| **Joe Shmoe** | **You** |
|---|---|
| $-2(x - 8) + 4x = -12$ | |
| $-2x - 16 + 4x = -12$ | |
| $-2x - 16 + 4x = -12$ | |
| $-2x - 16 = -12$ | |
| $+16 \quad +16$ | |
| $\frac{-2x}{2} = \frac{4}{2}$ | |
| $x = 2$ | |

5. Simplify the following expression:

$$2 + \sqrt[3]{729} \div 9 - 50 \div -2$$

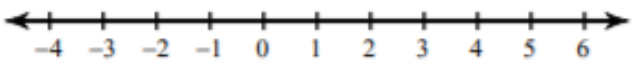
6. Graph a line which has a slope of -3 and goes through the point (1,4).



7. Simplify $\sqrt{3} \cdot \sqrt{9}$

8. Solve the following inequality and graph on the number line:

$$-3 - 6(4x + 6) > -111$$




9. Simplify:

$$(x^2y)(x^3y^4)$$

10. Solve the equation for h:

$$\frac{1}{2}(b + h) = A$$