

POP QUIZ!!

Each problem below is incorrect. Find the error and rework the problem off to the right.

1.  $\frac{x-3}{5} + 4 = -10$

$$x-3+4 = -50$$

$$x+1 = -50$$

$$x = -51$$

2.  $2|x - 5| + 12 = 30$

$$2|x-5| = 18$$

$$x-5 = 9$$

$$x = 14$$

3.  $4(x + 3)^2 - 8 = 100$

$$(4x+12)^2 + 8 = 100$$

$$(4x+12)^2 = 108$$

$$4x+12 = \sqrt{108}$$

$$4x+12 = 10.39$$

$$4x = -1.61$$

$$x = -0.402$$

$$4. 3 + 4\sqrt{x+1} = 5$$

$$7\sqrt{x+1} = 5$$

$$\sqrt{x+1} = \frac{5}{7}$$

$$x+1 = \left(\frac{5}{7}\right)^2$$

$$x+1 = \frac{25}{49}$$

$$x = -0.49$$

$$5. |x-4| = 3$$

$$x-4 = 3 \quad x+4 = 3$$

$$x = 7 \quad x = -1$$

$$6. \frac{x+1}{3} - \frac{x}{5} = 3$$

$$\frac{5x+1}{15} - \frac{3x}{15} = \frac{45}{15}$$

$$5x+1-3x = 45$$

$$2x+1 = 45$$

$$2x = 44$$

$$x = 22$$