

Additional Worksheet on Simplifying vs. Solving Equations

1) What is the main difference between a 'simplifying' problem vs. a 'solving' problem?

Simplify the following:

2) $-x + 5 - 3x - 1 + 14 =$

3) $2(x + 5) + 3x - 2 - 5x =$

4) $-(2x - 3) - 2x + 3 =$

5) $6 - (2x - 3) + 10 + 2x =$

6) **Find and explain the mistake, if any.**

$$3x + x - 2 = 3x + 4$$

$$4x - 2 = 3x + 4$$

$$7x - 2 = 4$$

$$7x = 6$$

$$x = \frac{6}{7}$$

Solve the following.

7) $3x - 8 = 5 - 2(x - 1)$

8) $\frac{x}{5} - 2 = -4$

9) $x + 12 - x = 5 + 8x - 9$

10) $4 - 3(2x + 5) = x - 9$

11) $\frac{3x}{2} + 4 = \frac{1}{5}$