

Name: _____ Date: _____ Period: _____ Score: _____/20

Sec 1 H Unit 1 Day 3 - Solving Multi-Step Equations Assignment



1) $27(x + 34) = -7 - 10x$

2) $2n + 23 = -7(2 + 5n)$

3) $-33x + 19(1 - 12x) = 33x + 19$

4) $18.338 - 6.1r = 7.4(1.3r + 6.23) - 3.1r$

5) $\frac{4}{7} + \frac{2}{3}x = 5$

6) $-\frac{5}{4}\left(r + \frac{3}{2}\right) = -6 - \frac{7}{3}r$

7) $-9(b + 10) = 9(b + 4)$

8) $\frac{2x-1}{3} = \frac{4x+5}{7}$

Solve. There may be no solution, one solution, or infinitely many solutions.

9) $12r - 6(2r + 1) = 0$

10) $6(5v + 3) + 4v + 7 = 25 - 9v$

11) $-3(8 + 8k) = -8 + 3(8k - 5)$

12) $4(10 - 9n) = 4n - 8(5n - 5)$

Find the error, then solve the equation correctly:

13) $34x - 94 = 18(x - 39)$

$$34x - 94 = 18x - 39$$

$$\underline{-18x} \quad \underline{-18x}$$

$$16x - 94 = -39$$

$$\underline{\quad +94} \quad \underline{\quad +94}$$

$$16x = 55$$

$$x = 3.4375$$

14) $-\frac{13}{12} - \frac{4}{3}n = -\frac{1}{3}\left(3n + \frac{11}{4}\right)$

Set up an appropriate equation, solve the equation, and then answer the question in the statement.

15) Angle A and Angle B are vertical angles. The measure of angle A is represented by the expression $24x - 5$ and the measure of angle B is represented by the expression $3(5x + 7) + 10$.

a) What is the value of x ?

b) What is the measure of angle A?

16) Angle A and Angle B are alternate interior angles. The measure of angle A is represented by the expression $2(2m + 1) + 11m$ and the measure of angle B is represented by the expression $5m + 2(4m + 7)$.

a) What is the value of m ?

b) What is the measure of angle A and angle B?

17) Angle A and Angle B are complementary angles. The measure of angle A is represented by the expression $4w + 55$ and the measure of angle B is represented by the expression $-7(w - 2)$.

a) What is the value of w ?

b) What is the measure of angle A and angle B?

The expert in anything was once a beginner.