AW Math 11

Day 6: Solving 1-Step Linear Equations

Equation: Math statement → Shows 2 quantities that are equal (=)

Variable: Symbol or letter representing a value $(x, m, n ....)$

Goal = get variable by itself.

Examples: Solve for the unknown variable

1) $x + 8 = 15$ $-8 \quad -8$ $\boxed{x = 7}$	2) $x + 12 + 9 = -3$ $x + 21 = -3$ $-21 \quad -21$ $x = -24$
3) $2w + 3w = 25$ $\dfrac{5w}{5} = \dfrac{25}{5}$ $\boxed{w = 5}$	4) $40 = t + 6 - 28$ $40 \quad t - 22$ $+22 \quad +22$ $\boxed{62 = t}$
5) $\dfrac{0.125m}{0.125} = \dfrac{4}{0.125}$ $\boxed{m = 32}$	6) $\dfrac{x}{5} = 3$ $\dfrac{5x}{5} = 3 \times 5$ $\boxed{x = 15}$

7) Lisa is cooking muffins. The recipe calls for 7 cups of sugar. She has already put in 2 cups. How many more cups does she need to put in? Write an equation, then solve for the variable.

$2 + x = 7$
$-2 \qquad -2$
$\boxed{x = 5}$

$\boxed{\text{Assign: Pg 31-32}}$

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AW Math 11

Day 6: Solving 1-Step Linear Equations Assignment

Solve the equations that follow:

1. $6p = 18$

2. $0.2k = 11$

3. $0.6667h = 12$

4. $54 = 2b$

5. $53f = 530$

7. $23 - x = 13$

8. $\frac{n}{2} = 2.3$

9. $\frac{a}{7} = 31$

10. $10y + 8y = 15$

11. $12s - 4s = 25$

12. Last week Julia ran 30 miles more than Sarah. Julia ran 47 miles. How many miles did Sarah run?

13. Your building a deck that is 48 feet wide. Your boards are 8 feet long. How many boards do you need to span the width of the deck?

14. Renovating your living room, you decide to re-do some of your drywall (gypsum). You wall is 24 feet long, but you decide to leave 6 feet of the old drywall. What is the width of new drywall that you need to buy?

15. A square house has a perimeter of 240 feet. You are wiring in an exterior light and need a wire the length of one of the side of the house. How long of a wire do you need?

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