

BUTCHER- TECHNICAL MATH B – PERIOD 3 – OFF-SITE LEARNING PACKET DAY 3

Instructor Nancy Butcher

Date Day 3

Program/Class Tech Math B

Period 1,2,3

State Indicator/Competency:

- Explain each step in solving a simple equation as following from the equality of number asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.
- Solve simple rational and radical equations in one variable, and give examples showing how extraneous solutions may arise.
- Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.

Instructional Objective(s):

- Students will solve equations consisting of combined operations with 80% accuracy.

Materials:

Student: Pencil, Packet 3, calculator

Method of Instruction:

Independent

Activities:

COMPLETE Day 3 ASSIGNMENT

Examples:

Solve for the variable.

1.
$$\begin{array}{r} 5x + 12 = 52 \\ - 12 \quad - 12 \end{array}$$

$$5x = 40$$

$$x = 8$$

2.
$$-18D + 4D = 3D - 5D + 19 + 5$$

$$\begin{aligned} -14D &= -2D + 24 \\ + 2D & \quad + 2D \end{aligned}$$

$$-12D = 24$$

$$D = -2$$

3. $14y - 6(y - 3) = 22$

$$14y - 6y + 18 = 22$$

$$8y + 18 = 22$$

$$8y = 4$$

$$y = 0.5$$

4. $-5(4x - 2) = -2(3 + 6x)$

$$-20x + 10 = -6 - 12x$$

$$-8x = -16$$

$$x = 2$$

5. $5(2x + 6) = -4(-5 - 2x) + 3x$

$$10x + 30 = 20 + 8x + 3x$$

$$10x + 30 = 20 + 11x$$

$$10 = 1x$$

$$10 = x$$

Assessment: Worksheet Day 3: Multi-step equations (10 points)

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Multi-Step Equations

Name: _____ PD: _____

1) $6x + 5a = -11$

2) $-6n - 2n = 16$

3) $4x + 6 + 3 = 17$

4) $0 = -5n - 2n$

5) $6r - 1 + 6r = 11$

6) $r + 11 + 8r = 29$

7) $18 = 3(3x - 6)$

8) $30 = -5(6n + 6)$

9) $37 = -3 + 5(x + 6)$

10) $-13 = 5(1 + 4m) - 2m$

11) $8(1 + 5x) + 5 = 13 + 5x$

12) $-11 - 5a = 6(5a + 4)$