Instructor: Nancy Butcher   Date: Day 1

Program/Class: Tech Math B   Period: 1,2,3

State Indicator/Competency: Analyze proportional relationships and use them to solve real-world and mathematical problems.

Instructional Objective(s):
- Students will be able to solve proportions with 80% accuracy.

Student Materials: Off-Site Learning Packet Day 1, pencil, calculator

Method of Instruction: Independent

Activities:

Off-Site Learning Packet Day 1

Vocabulary:
Ratio – a comparison of two numbers by division
Proportion – an equation stating that two ratios are equal

In a proportion, the cross products are equal.

Ex. 1) Solve each proportion.

a. $\frac{y}{12} = \frac{77}{84}$ b. $\frac{15}{x} = \frac{2.5}{7}$

   84y = 77 x 12   2.5x = 15 x 7
   84y = 924   2.5x = 105
   y = 11   x = 42

Ex. 2) $\frac{4}{6} = \frac{3}{x+2}$

   4(x+2) = 3 x 6
   4x + 8 = 18
   4x = 10
   X = $\frac{10}{4}$ = 1 1/2

Assessment: Worksheet 1: Solving Proportions (10 points)

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Solve each proportion Part 1

1) $\dfrac{4}{3} = \dfrac{5}{v}$

2) $\dfrac{p}{6} = \dfrac{8}{7}$

3) $\dfrac{2}{4} = \dfrac{4}{n}$

4) $\dfrac{2}{a} = \dfrac{3}{8}$

5) $\dfrac{8}{4} = \dfrac{x}{3}$

6) $\dfrac{9}{x} = \dfrac{4}{2}$

7) $\dfrac{7}{x} = \dfrac{3}{10}$

8) $\dfrac{9}{3} = \dfrac{8}{x}$

9) $\dfrac{6}{v} = \dfrac{8}{3}$

10) $\dfrac{8}{6} = \dfrac{a}{9}$