Notes – College Algebra

Section 2.7 – Solving Proportions

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_

**Starter**:

1. Convert the given amount to the given unit
   1. 63 yd; ft
   2. 79 dollars; cents
   3. 7 ft 3 inches to \_\_\_\_ inches
2. A college student is considering a subscription to a social-networking site that advertises its cost as “only 87 cents per day”. What is the cost of the membership in dollars per year?

**Notes**: Solving Proportions

**Proportion**:

Ex: You are making bead necklaces, using a pattern in which 2 large red beads are followed by 3 small blue beads. Each set of 5 beads adds 1 ¼ inches to the length of the necklace. How many of each color bead will you need for a 20 inch necklace?

**Cross Product Property**:

Problem 2: Solving a proportion using the Cross Product Property:

Ex:

Ex:

Problem 3: Solving a Multi-Step Proportion

Ex:

Ex:

Problem 4: Using a proportion to solve a problem

Ex: A portable media player has 2 gigabytes of storage and can hold about 500 songs. A similar but larger media player has 80 gigabytes of storage. About how many songs can the larger media player hold?

Ex: An 8-oz. can of orange juice contains about 97 mg of vitamin C. About how many milligrams of vitamin C are there in a 12-oz can of orange juice?

You try…

Solve each proportion

1. A band went to a recording studio and recorded 4 songs in 3 hours. How long would it take the band to record 9 songs if they record at the same rate?

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