Name: _____ Date: _____

Unit 4 Study Guide

ANSWER KEY

5.NF.1 Add and subtract fractions and mixed numbers with unlike denominators

Solve. Simplify your answer if necessary.

2/5 + 4/9 =

38/45

11/12 - 3/4 =

1/6

4 5/7 + 1 1/3 =

6 1/21

5 4/5 - 3 1/2 =

2 3/10

5.NF.2 Solve word problems involving addition and subtraction of fractions.

Meredith combined 3 1/4 cups of water and 2 2/3 cups of milk to create a cupcake mixture. How many cups does she have combined? Simplify your answer if necessary.

5 11/12 cups

Everett filled a bath tub with 12 2/3 gallons of water to wash his dog. By the time his dog was clean, he had splashed 4 1/5 gallons of water onto the floor. How many gallons of water were left in the tub? Simplify your answer if necessary.

8 7/15 gallons

5.NF.3 Interpret a fraction as division of the numerator by the denominator, including word problems.

Write 5/8 as an expression

$$5 \div 8$$

7 friends went to a pizza parlor and decided to share some pizza. If they evenly split 2 pizza pies, how much pizza did each friend get? Simplify your answer if necessary.

2/7 pizzas

5.NF.4 Multiply a fraction or whole number by a fraction.

4/5 x 1/3 = 4/15

3/8 x 7 = 2 5/8

2 1/2 x 3 3/4 = 9 3/8

5.NF.5 Compare the size of a product to the size of one factor on the basis of the size of the other factor, without actually multiplying them.

Tell whether the product of the following equations will be *greater than*, *less than*, or *equal to* the first factor.

Example: 1/2 x 3/8 = The product will be *less than* 1/2 because 3/8 is less than one.

3/4 x 2/3 = less than 3/4

4/5 x 3 = greater than

2/7 x 2/2 = equal to 4/5 2/7

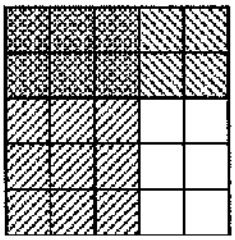
5.NF.6 Solve real world problems involving multiplication of fractions and mixed numbers. Use visual models to represent them.

Amy had 7/8 pounds of steak for dinner. She ate 3/4 of it. How many pounds of steak did Amy eat? Simplify your answer if necessary.

21/32 pounds

Write an equation to match the model:

$2/5 \times 3/5 = 6/25$



5.NF.7 Divide fractions by fractions and whole numbers, including real world problems.

Solve. Simplify your answer if necessary.

$3 \div 3/5 = 5$ $3/4 \div 6 = 1/8$ $2/7 \div 4/5 = 5/14$

Ben has 6 pounds of bolts in his auto shop. He has to separate them into boxes, each with 1/3 pound of bolts. How many boxes can he fill? Simplify your answer if necessary.

18 boxes

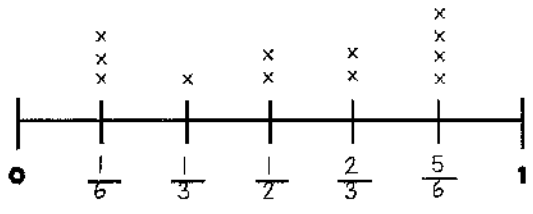
Julie has 4 2/3 cups of cake batter to make cupcakes. If she splits it to make 12 cupcakes, how many cups of batter will be in each cupcake? Simplify your answer if necessary.

7/18 cups

5.MD.2 Make a line plot to display fractional measurements and use fraction operations to solve problems with this information.

Claire measured the weight of a handful of raisins and recorded their measurements on the line plot. How much did all of the raisins weigh together?

6 1/2 grams



weight of raisins (grams)