Unit 3 Study Guide
Multiply & Divide Fractions

FRACTION WORD PROBLEMS

MULTIPLY-OR-DIVIDE?

WHEN TO MULTIPLY:

✗ Do you have fractional groups or amounts and is the problem asking for a total?

✗ Are you taking part of a whole?

✗ Are you taking part of a part?

✗ Are you trying to determine the total amount you need for X people, containers, etc.?

WHEN TO DIVIDE:

÷ Are you dividing a given amount into equal groups?

÷ Are you taking an amount and sorting it, breaking it up, or cutting it into equal parts?

÷ Are you eating, drinking, or using an equal amount of a total each day and looking for how much you eat, drink, or use each day?

1.) Rachel has a rope that is 16 feet long. She cuts the entire rope into pieces that were 1/4 foot long. How many pieces did Rachel cut?

2.) A butcher has 1/5 pound of beef. He divides the beef evenly among 5 bags. What fraction of a pound of beef goes into each bag?

3.) Rick wants to use 4 different colors on 1/6 of his painting. He will use an equal amount of space for each color. What fraction of the total picture space will contain each color?

4.) A pitcher of lemon aid needs 1 1/3 cup of sugar. If you make 4 pitchers, how much sugar will you need?

5.) Elizabeth has 9 bags of candy. Each bag weighs 2/3 pound. What is the total weight, in pounds, of the 9 bags of candy?

6.) Trish drew a rectangle with a length of 1/4 and a width of 4/10 foot. What is the area, in square feet of Trish's picture?

7.) Mary has **2 1/3** pounds of fruit. She used 2/3 of the fruit for a breakfast recipe. How much fruit did she use for the recipe? How much fruit was left over?

8.) A frame has an area of 1/10 square feet. If the frame is 5 feet wide what is the length of the frame?

9.) What is 1/4 of 1/6?

10.) An outdoor concert venue has 5 rows of seats. Each row holds 20 people. All of the seats are full on 4 of the rows. The 5th row has 2/4 of the seats filled. How many TOTAL seats are filled?

11.) After a birthday party, Walter had **2 2/3** pizzas left over. Walter's uncle ate 1/4 of the left overs. How much pizza did Walter's uncle eat?

12.) Ben has 1/2 gallon of paint. He poured the paint into 4 cups. What fraction of the gallon of paint is in each cup?