**Grade 8 Math Review**

# **Unit 3: Operations With Fractions Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**NOTE: All answers should be written in lowest form and as a mixed fraction**

**Section A:** For each of the following, place the answer in the space to the right. [10]

1. What fraction is represented by the shaded area? (lowest terms)



Ex: \_\_\_\_ × \_\_\_\_ = \_\_\_\_\_\_

1. Write  as repeated addition:
2. Multiply 
3. Find $\frac{1}{5} $of 30
4. How many sectors of this circle would be

shaded in to represent  of 

1. Suppose you had 24 cookies. How many did
2. you eat if you ate  of them.
3. Write the reciprocal of 
4. Write  as an improper fraction
5. Write as a mixed number
6. Write a multiplication equation that is represented on the

 following number line:



**Section B: Answer each of the following in the space provided.**

1. Use a model to show the answer for  [2]

State the answer.

1)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Use a model to find  of  [2]

State your answer.

1. Use an area model to multiply  [3]
2. Use a model to show  [2]
3. Multiply or divide each of the following **without** models. Be sure to show your working and that your final answer is in simplest form. [10]
4.  B) 

C)  D) 

1. A cookie recipe which makes 15 cookies calls for cups of flour. If John has  cups of flour, how many cookies can he make? [3]
2. Stephen has $200.00 to spend on his Christmas shopping for this season. He has 5 people he needs to buy presents. He spends $\frac{1}{8}$ of his money on his sister’s gift and $\frac{2}{3}$ of his money on his parent’s gifts.
3. What fraction of his money does Stephen have left to spent on his grandparent’s gifts? ( 3 marks )
4. How much money does he spend on his sister’s gift? ( 2 marks )
5. Evaluate the following. Be sure to show all workings for full marks. [5]
6. 
7. $\left(\frac{3}{8}- \frac{1}{3}\right) ÷ \frac{7}{12}$
8. $\left[\frac{2}{5} × \frac{3}{4}\right]+ \left[\frac{2}{3} ÷ \frac{5}{6}\right]$