

## Fraction Concepts Assessment

1. How much of this cookie do you see?

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4. If all bags of M&M's had the same fraction of red ones as in problem 2, how many red ones would you find in a bag that has 60 M&M's in it?

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2. What fraction of this pan of brownies is missing?



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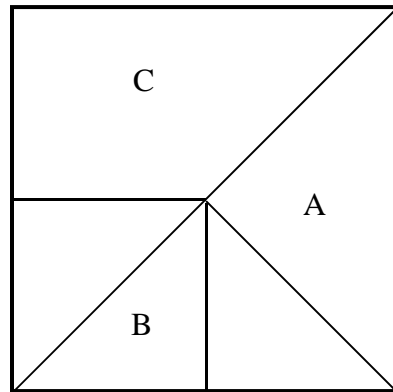
5. Which is larger,  $\frac{3}{4}$  or  $\frac{3}{7}$ ? **Circle the larger fraction and make drawings to explain your answer.**

3. In a bag of 30 M&M's, you count 10 red ones. What fraction of the M&M's are red?

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6. Which is larger,  $\frac{3}{4}$  or  $\frac{2}{3}$ ? **Circle the larger fraction and explain why you think it is larger.**

7. Look at the drawing below. What fraction of the whole square is region A? \_\_\_\_\_

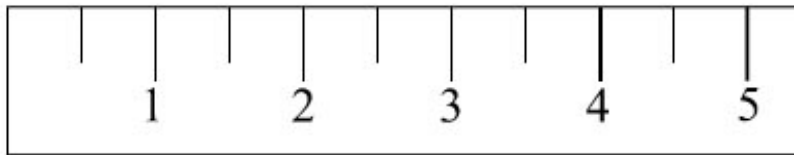


region B? \_\_\_\_\_

region C? \_\_\_\_\_

8. Show where these fractions would be on this ruler:

$$\frac{1}{4} \quad 1\frac{1}{2} \quad 2\frac{3}{4} \quad \frac{8}{4}$$



9. Put these fractions in order from smallest to largest:  $\frac{3}{4}$ ,  $\frac{1}{10}$ ,  $\frac{5}{12}$ ,  $\frac{3}{5}$ ,  $\frac{14}{15}$

smallest \_\_\_\_\_ largest

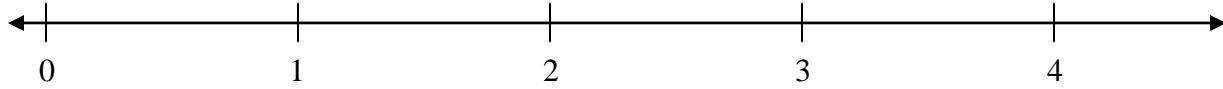
10. For each of the following problems, explain if you think the answer is a reasonable estimate or not.

$$\frac{2}{3} + \frac{1}{4} = \frac{11}{12}$$

$$\frac{11}{12} - \frac{1}{2} = \frac{10}{12}$$

$$\frac{2}{3} - \frac{1}{4} = \frac{1}{12}$$

11. Put a dot on this number line at  $\frac{21}{8}$  and write this number below the dot. How much is this as a mixed number? \_\_\_\_\_



12. Write these mixed numbers as fractions:

$$3\frac{1}{4} = \underline{\hspace{2cm}}$$

$$5\frac{3}{10} = \underline{\hspace{2cm}}$$

13. An equivalent fraction for  $\frac{9}{12}$  is  $\frac{\quad}{4}$ .  
(Fill in the blank.)

14. Write any equivalent fraction for  $\frac{2}{3}$

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15. A cake recipe requires  $1\frac{2}{3}$  cup of sugar for the frosting and  $\frac{2}{3}$  cup of sugar for the cake. How much sugar is that altogether?

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16.  $\frac{1}{10}$  of the M&M's in a bag are red and  $\frac{1}{5}$  are blue. What fraction of all the M&M's are red **and** blue?

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17. Pam walks  $\frac{7}{8}$  of a mile to school. Paul walks  $\frac{1}{2}$  of a mile to school. How much farther does Pam walk than Paul? ***Draw a picture to show this, then write the answer as a fraction.***

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18. A bakery has planned to make cakes today. They need  $\frac{2}{3}$  tablespoon of baking powder for each cake. They want to bake 12 cakes. How much baking powder do they need for all 12 cakes?

**SHOW YOUR WORK.**

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19. Find each answer:

$$\frac{2}{3} + \frac{1}{6} =$$

$$\frac{2}{3} + \frac{3}{4} =$$

$$\frac{3}{2} - \frac{1}{4} =$$

$$\frac{1}{2} - \frac{1}{5} =$$

20. You have 6 donuts and you want to give  $\frac{2}{3}$  of them to a friend. How many donuts would your friend get? That is, how much is  $\frac{2}{3}$  of 6?

**SHOW YOUR WORK.**

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21. Find each answer:

$$\frac{1}{2} \times \frac{2}{3} =$$

$$1\frac{3}{4} \times \frac{9}{4} =$$

22. How much is  $\frac{2}{3}$  of  $\frac{3}{4}$ ? Draw a picture to show this.

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23. Ted eats  $\frac{3}{4}$  cup of cereal for breakfast every day. How many days does it take him to eat the whole box of cereal, if it holds 13 cups altogether?

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24. A cupcake recipe uses  $\frac{1}{4}$  of a cup of milk.

You have  $3\frac{1}{2}$  cups of milk. How many full recipes of cupcakes can you make with that much milk? **Decide whether to use multiplication or division to find the answer, then show how to calculate this.**

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