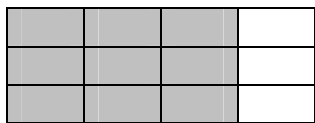


Sequential Fraction Diagnostic Assessment

1. Three brownies have been eaten out of this pan. What fraction of the pan of brownies is left?



- A) $\frac{3}{9}$
- B) $\frac{3}{12}$
- C) $\frac{9}{12}$
- D) $\frac{9}{3}$

2. In a bag of 40 M&M's, you count 12 red ones. What fraction of the M&M's are red?

- A) $\frac{40}{12}$
- B) $\frac{12}{28}$
- C) $\frac{6}{40}$
- D) $\frac{12}{40}$

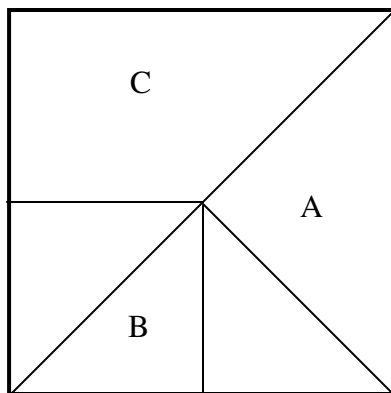
3. If all bags of M&M's had the same fraction of red ones as in problem 2, how many red ones would you find in a bag that has 120 M&M's in it?

- a) 120
- b) 40
- c) 36
- d) 24

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

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

6. Look at the drawing below. What fraction of the whole square is region A? _____



region B? _____

region C? _____

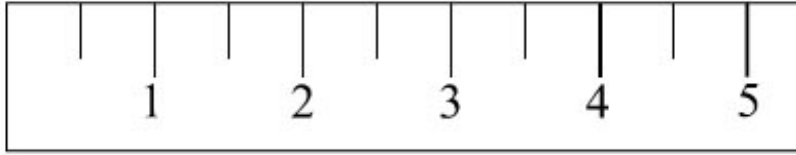
7. Show where these fractions would be on this ruler:

$$\frac{1}{4}$$

$$1\frac{1}{2}$$

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

$$\frac{8}{4}$$



8. Order these fractions from smallest to largest: $\frac{3}{4}$, $\frac{1}{10}$, $\frac{5}{12}$, $\frac{3}{5}$, $\frac{14}{15}$

smallest _____ largest

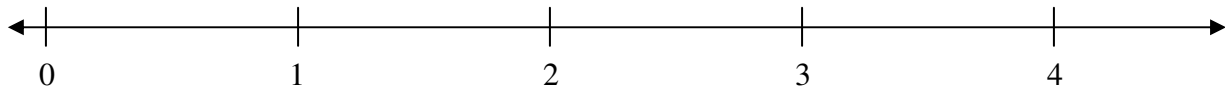
9. For each of the following problems, explain if you think the answer is a reasonable estimate or not.

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

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

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

10. 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? _____



11. Write these mixed numbers as improper fractions:

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

$$23\frac{3}{10} = \underline{\hspace{2cm}}$$

12. Which fraction is equivalent to $\frac{9}{12}$:

A) $\frac{3}{4}$

B) $\frac{6}{9}$

C) $\frac{4}{6}$

D) $\frac{3}{6}$

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

_____.

14. 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?

15. $\frac{1}{10}$ 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? What fraction of the M&M's are NOT red or blue?

16. 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? (segments on a number line)

17. Find each answer:

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

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

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

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

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

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

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.

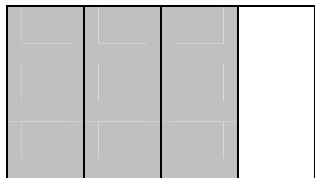
21. Ted eats $\frac{3}{4}$ cup of cereal for breakfast every day. How many days does it take him to eat the whole box of cereal, if it holds 13 cups altogether?

Answer _____

19. You have 6 donuts and you want to give $\frac{2}{3}$ of them to a friend and keep $\frac{1}{3}$ for yourself. How many donuts would your friend get? That is, how much is $\frac{2}{3}$ of 6?

22. A book shelf is $3\frac{1}{2}$ feet long. Each book on the shelf is $\frac{5}{8}$ inches wide. How many books will fit on the shelf? **Decide whether to use multiplication or division to find the answer, then show how to calculate this.** Answer _____

20. A pan of brownies was left out on the counter and $\frac{1}{4}$ of the brownies were eaten ($\frac{3}{4}$ of the brownies were left, as shown in the picture).



You ate $\frac{2}{3}$ of the brownies that were left. How much of the whole pan of brownies was eaten?

Answer _____