

Understanding of Equivalent Fractions

Name: _____

Write the missing numbers in the boxes to make each equation true.

$$1 \quad \frac{2}{4} \times \frac{\boxed{4}}{\boxed{4}} = \frac{8}{16}$$

$$2 \quad \frac{2}{3} \times \frac{\boxed{6}}{\boxed{6}} = \frac{12}{18}$$

$$3 \quad \frac{5}{6} \times \frac{\boxed{5}}{\boxed{5}} = \frac{25}{30}$$

$$4 \quad \frac{2}{3} \times \frac{\boxed{3}}{\boxed{9}} = \frac{6}{9}$$

$$5 \quad \frac{3}{8} \times \frac{5}{\boxed{3}} = \frac{15}{\boxed{24}}$$

$$6 \quad \frac{5}{6} \times \frac{\boxed{2}}{\boxed{2}} = \frac{\boxed{10}}{12}$$

$$7 \quad \frac{5}{\boxed{8}} \times \frac{\boxed{3}}{\boxed{3}} = \frac{15}{24}$$

$$8 \quad \frac{2}{\boxed{3}} \times \frac{4}{\boxed{4}} = \frac{\boxed{8}}{12}$$

$$9 \quad \frac{\boxed{3}}{8} \times \frac{2}{\boxed{2}} = \frac{\boxed{6}}{16}$$

Sample
Answer

Sample Answer

10 Which strategies did you use to solve the problems? Explain why.

I used both multiplication and division to help me solve the problems. For example: in problem number 8. I know that $2 \times 4 = 8$. I also know that I will need to place a 4 in the missing denominator because while finding an equivalent fraction you multiply (or divide) the numerator and denominator by the same number. I know $12 \div 3 = 4$. Therefore, the missing numbers are 8, 3, and 4.

Write the missing numbers in the boxes to make each addition problem true.

$$1 \quad \frac{1}{6} + \frac{4}{6} = \frac{\boxed{5}}{6}$$

$$2 \quad \frac{1}{8} + \frac{4}{8} = \frac{\boxed{5}}{\boxed{8}}$$

$$3 \quad \frac{1}{10} + \frac{4}{10} = \frac{\boxed{5}}{\boxed{10}}$$

$$4 \quad \frac{4}{12} + \frac{\boxed{3}}{\boxed{12}} = \frac{7}{12}$$

$$5 \quad \frac{4}{6} + \frac{\boxed{3}}{\boxed{6}} = \frac{7}{6}$$

$$6 \quad \frac{4}{3} + \frac{\boxed{3}}{\boxed{3}} = \frac{7}{3}$$

$$7 \quad \frac{\boxed{3}}{\boxed{4}} + \frac{2}{4} = \frac{5}{4}$$

$$8 \quad \frac{\boxed{3}}{\boxed{10}} + \frac{2}{10} = \frac{5}{10}$$

$$9 \quad \frac{\boxed{3}}{\boxed{8}} + \frac{2}{8} = \frac{5}{8}$$

Sample Answers 11-12

$$10 \quad \frac{\boxed{1}}{6} + \frac{2}{6} = \frac{\boxed{3}}{6}$$

$$11 \quad \frac{\boxed{2}}{5} + \frac{1}{5} = \frac{\boxed{3}}{5}$$

$$12 \quad \frac{4}{10} + \frac{\boxed{3}}{10} = \frac{\boxed{7}}{10}$$

13 Write a number from 1-12 in each box so that the addition problem is true.

$$\frac{\boxed{2}}{12} + \frac{5}{\boxed{12}} = \frac{\boxed{7}}{12}$$

Solve each problem.

- 1** Sammy has $\frac{4}{5}$ of his art project left to paint. He paints $\frac{2}{5}$ of the project. What fraction of the project is left to paint?

$$4/5 - 2/5 = 2/5$$

$2/5$ of the art project is left to paint.

- 2** Marianne has $\frac{6}{8}$ of a yard of green ribbon. She uses $\frac{3}{8}$ of a yard for a craft project. How much green ribbon is left?

$$6/8 - 3/8 = 3/8$$

$3/8$ of a yard of green ribbon is left.

- 3** Yuna plans to run 1 mile. She has run $\frac{7}{10}$ of a mile so far. What fraction of a mile does she have left to run?

$$10/10 - 7/10 = 3/10$$

$3/10$ of a mile is left to run

- 4** Alex and Brady are helping to pack books into a box. Together they pack $\frac{7}{12}$ of the books. Alex packs $\frac{4}{12}$ of the books. What fraction of the books does Brady pack?

$$7/12 - 4/12 = 3/12$$

$3/12$ of the books are left for Brady to pack.

- 5** On Monday, Adam walks $\frac{3}{10}$ of a mile to the store and then $\frac{4}{10}$ of a mile to the park. How far does he walk in all?

$$3/10 + 4/10 = 7/10$$

Adam walked $7/10$ of a mile.

- 6** Javier has $\frac{7}{8}$ of a cup of flour. He uses $\frac{3}{8}$ of a cup in a recipe. How much flour does Javier have left?

$$7/8 - 3/8 = 4/8 \text{ (1/2)}$$

$4/8$ (1/2) of the flour is left

- 7** Shawna practices piano for $\frac{4}{6}$ of an hour and takes a break. Shawna then practices for $\frac{2}{6}$ of an hour more. How long does Shawna practice in all?

$$4/6 + 2/6 = 6/6 \text{ (1)}$$

Shawna practices piano for $6/6$ (1) hour

- 8** Kailee has finished $\frac{4}{5}$ of her math homework so far. What fraction of her math homework does she have left to finish?

$$5/5 - 4/5 = 1/5$$

Kailee has $1/5$ of her math homework to finish.

Sample Answer

- 9** Explain one way to check your work to problem 2.

One way to check your work is by doing the inverse (opposite) operation. The inverse operation of subtraction is addition. So, I will add to check my problem. $3/8 + 4/8 = 7/8$. Therefore, the answer is correct. The fractions are in the same fact family.