

## Division of Fractions

### A. Fill in the Blanks

1. To divide by a fraction, you multiply by its \_\_\_\_\_.
2. Before you can divide mixed numbers, you must first convert them to \_\_\_\_\_ fractions.
3. The reciprocal of  $\frac{7}{11}$  is \_\_\_\_\_.
4. Dividing a positive number by a proper fraction (like  $\frac{1}{2}$ ) will result in an answer that is \_\_\_\_\_ than the original number.
5.  $\frac{8}{9} \div 1 =$  \_\_\_\_\_.

### B. Match the Following;

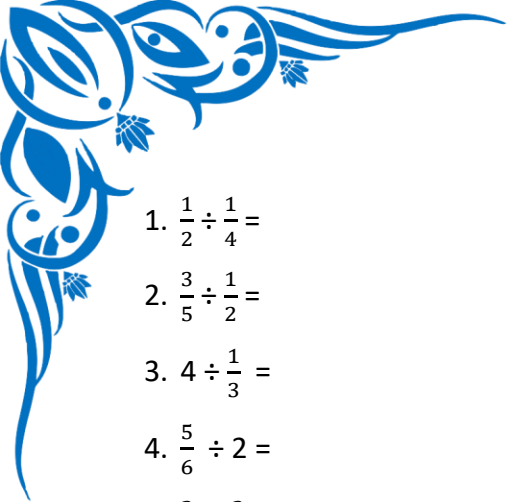
Column A (Problem)	Column B (Answer)
1. $\frac{3}{4} \div \frac{1}{8}$	A. $\frac{1}{10}$
2. $\frac{2}{5} \div 4$	B. 2
3. $1\frac{1}{3} \div \frac{2}{3}$	C. 6
4. $5 \div \frac{1}{2}$	D. $1\frac{1}{2}$
5. $\frac{3}{5} \div \frac{2}{3}$	E. 10
	F. $\frac{9}{10}$

### C. Practice Problems

Now, let's try some problems with mixed numbers and improper fractions.

1.  $\frac{7}{8} \div \frac{3}{4} =$
2.  $\frac{5}{12} \div \frac{10}{3} =$
3.  $2\frac{1}{2} \div \frac{1}{4} =$
4.  $3\frac{1}{3} \div \frac{5}{6} =$
5.  $\frac{5}{8} \div 2\frac{1}{2} =$

### D. Warm-up Questions



1.  $\frac{1}{2} \div \frac{1}{4} =$

2.  $\frac{3}{5} \div \frac{1}{2} =$

3.  $4 \div \frac{1}{3} =$

4.  $\frac{5}{6} \div 2 =$

5.  $\frac{2}{7} \div \frac{2}{7} =$

### E. Challenge Questions

1.  $(\frac{1}{2} \div \frac{3}{4}) \div \frac{5}{6} =$

2.  $4\frac{1}{2} \div (\frac{1}{3} + \frac{1}{6}) =$

3. What is the value of the complex fraction below?  $\frac{3\frac{3}{5}}{2\frac{1}{4}}$

4. Find the missing number:  $\frac{5}{8} \div \underline{\hspace{1cm}} = 2\frac{1}{2}$

5. A number divided by  $\frac{3}{4}$  gives a result of  $2\frac{2}{3}$ . What is the number?

### F. Word Problems & Application

1. A baker has  $6\frac{1}{4}$  cups of flour. A recipe for one batch of cookies requires  $1\frac{1}{4}$  cups of flour. How many batches of cookies can the baker make?
2. Liam is building a shelf that is  $3\frac{1}{2}$  feet long. He needs to cut it into smaller pieces that are each  $\frac{1}{4}$  of a foot long. How many pieces can he cut from the shelf?
3. A rectangular garden has an area of  $15\frac{3}{4}$  square meters. If the width of the garden is  $2\frac{1}{2}$  meters, what is its length? (Area = Length  $\times$  Width)
4. Samantha ran a total of 12 miles over several days. If she ran  $1\frac{1}{2}$  miles each day, how many days did she run?
5. How many  $\frac{3}{4}$  cup servings are in a  $10\frac{1}{2}$  cup container of juice?

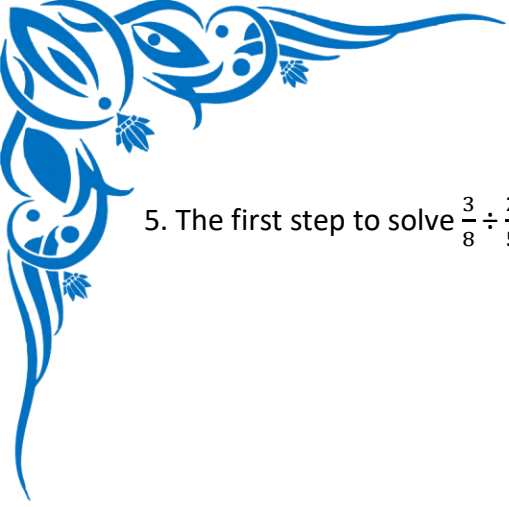
### G. True or False

1. To solve  $\frac{1}{3} \div \frac{4}{5}$ , you calculate  $\frac{3}{1} \times \frac{4}{5}$ . \_\_\_\_\_

2. The reciprocal of 5 is  $\frac{5}{1}$ . \_\_\_\_\_

3. Division always makes a number smaller. \_\_\_\_\_

4.  $2\frac{1}{2} \div 1\frac{1}{4}$  is the same as  $\frac{5}{2} \div \frac{4}{5}$ . \_\_\_\_\_



5. The first step to solve  $\frac{3}{8} \div \frac{2}{5}$  is to flip the fraction  $\frac{3}{8}$ .

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