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 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: $\frac{5}{8} \div$ _____ = 2 1/2
5. A number divided by 3/4 gives a result of 2 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 × Width)
4. Samantha ran a total of 12 miles over several days. If she ran 1 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 $\frac{3}{8}$. _____