# **Some Problems Involving Fractions**

#### A. Fill in the Blanks

- 1. To divide one fraction by another, you multiply the first fraction by the \_\_\_\_\_ of the second fraction.
- 2. Before adding or subtracting fractions with different denominators, you must find a \_\_\_\_\_\_.
- 3. In the fraction  $\frac{7}{11}$ , the number 7 is called the \_\_\_\_\_.
- 4. The product of a fraction and its reciprocal is always \_\_\_\_\_.
- 5. In word problems, the word "of" usually indicates the operation of \_\_\_\_\_\_.

#### B. Match the Following;

Column A (Type of Triangle)	Column B (Property))
1. The total of $\frac{1}{2}$ and $\frac{1}{4}$	A. Subtraction (–)
2. How much is left after taking $\frac{1}{3}$ away?	B. Division (÷)
$3.\frac{3}{4}$ of the students	C. Addition (+)
4. Split $\frac{1}{2}$ of a pizza among 3 people	D. Multiplication (×)
5. The difference between $\frac{7}{8}$	
and $\frac{1}{2}$	

## **C. Practice Problems**

1. 
$$\frac{2}{3} + \frac{1}{4} =$$

2. 
$$\frac{7}{8} - \frac{1}{2} =$$

3. 
$$\frac{3}{5} \times \frac{10}{12} =$$

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

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

### D. Warm-up Questions

1. 
$$\frac{1}{7} + \frac{4}{7} =$$

$$2.\frac{5}{8} - \frac{2}{8} =$$

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



5. What is 
$$\frac{1}{5}$$
 of 20?

# E. Challenge Questions

1. 
$$(\frac{5}{6} - \frac{1}{3}) \times (\frac{2}{3} + \frac{1}{2}) =$$

- 2. A number x is increased by  $\frac{1}{4}$  of itself. If the new number is 50, what was the original number x?
- 3. Simplify the complex fraction:  $(1 + \frac{1}{2}) / (1 \frac{1}{4}) =$
- 4. Find the value of:  $5 \left[2\frac{1}{2} + \left(\frac{3}{4} \div \frac{1}{2}\right)\right] =$
- 5. What fraction is exactly halfway between  $\frac{1}{5}$  and  $\frac{3}{4}$ ?

#### F. Word Problems & Application

- 1. A recipe for a batch of cookies requires  $1\frac{3}{4}$  cups of flour. If you want to make  $2\frac{1}{2}$  batches, how much flour will you need?
- 2. Leo spent  $\frac{1}{3}$  of his monthly allowance on a video game and  $\frac{1}{5}$  on snacks. What fraction of his allowance does he have left?
- 3. A rectangular park is  $\frac{3}{4}$  km long and  $\frac{2}{5}$  km wide. What is the area of the park in square kilometers?
- 4. Samantha has a ribbon that is 5 1/4 meters long. She needs to cut it into smaller pieces that are each  $\frac{3}{4}$  meter long. How many full pieces can she cut from the ribbon?
- 5. On a school trip,  $\frac{3}{5}$  of the students are girls. If there are 75 students on the trip, how many are boys?

#### **G.** True or False

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

2. To multiply fractions, you must first find a common denominator.

3. The fraction  $\frac{5}{4}$  is an example of an improper fraction.

4.  $2\frac{1}{2} \div \frac{1}{2}$  is equal to 5.

5.  $\frac{1}{4}$  is greater than  $\frac{1}{3}$ .