

Multiplication of Fractions

A. Fill in the Blanks

1. To multiply fractions, you multiply the numerators and then multiply the _____.
2. Before multiplying $\frac{31}{4}$ by a fraction, you must first convert it to an _____ fraction.
3. In word problems, the word "of" usually implies the operation of _____.
4. The product of any non-zero fraction and its reciprocal is always _____.
5. Simplifying fractions before multiplying is often called _____.

B. Match the Following;

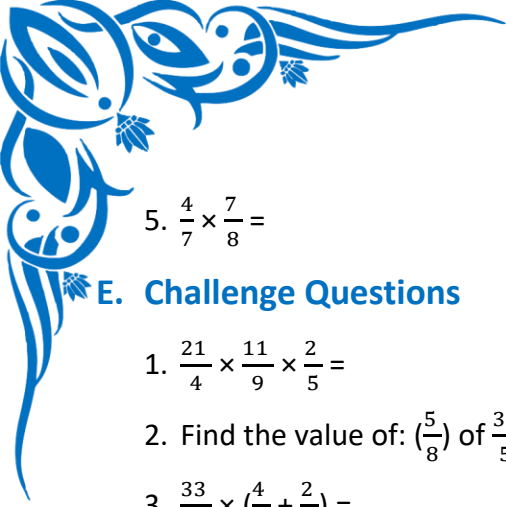
Column A (Type of Triangle)	Column B (Property))
1. $\frac{3}{5} \times \frac{10}{21}$	A. $\frac{11}{2}$
2. $\frac{21}{4} \times \frac{2}{3}$	B. $\frac{1}{3}$
3. $\frac{5}{6} \times \frac{2}{5}$	C. 7
4. $\frac{31}{2} \times 2$	D. $\frac{2}{7}$
5. $\frac{41}{3} \times \frac{3}{4}$	E. $\frac{31}{4}$

C. Practice Problems

1. $\frac{5}{6} \times \frac{9}{10} =$
2. $\frac{3}{4} \times \frac{11}{5} =$
3. $\frac{21}{2} \times \frac{2}{3} =$
4. $\frac{11}{4} \times \frac{11}{3} =$
5. $7 \times \frac{21}{7} =$

D. Warm-up Questions

1. $\frac{1}{2} \times \frac{1}{4} =$
2. $\frac{1}{3} \times \frac{1}{5} =$
3. $\frac{3}{4} \times \frac{2}{3} =$
4. $5 \times \frac{1}{6} =$



5. $\frac{4}{7} \times \frac{7}{8} =$

E. Challenge Questions

1. $\frac{21}{4} \times \frac{11}{9} \times \frac{2}{5} =$

2. Find the value of: $(\frac{5}{8})$ of $\frac{31}{5}$

3. $\frac{33}{4} \times (\frac{4}{5} + \frac{2}{5}) =$

4. A square has a side length of $\frac{31}{2}$ cm. What is its area? (Area = side \times side)

5. What is $\frac{2}{3}$ of $\frac{3}{4}$ of $\frac{4}{5}$ of 50?

F. Word Problems & Application

1. A recipe for a batch of cookies requires $\frac{11}{2}$ cups of sugar. If you are only making $\frac{2}{3}$ of the batch, how much sugar will you need?

2. Leo's car has a gas tank that holds 12 gallons. If the tank is $\frac{3}{4}$ full, how many gallons of gas are in the tank?

3. A rectangular park is $\frac{7}{8}$ of a mile long and $\frac{1}{2}$ of a mile wide. What is the area of the park in square miles?

4. Of the students in a class, $\frac{4}{5}$ have brown hair. Of the students with brown hair, $\frac{1}{4}$ also wear glasses. What fraction of the entire class has brown hair and wears glasses?

5. Samantha spent $\frac{21}{2}$ hours on homework. She spent $\frac{2}{5}$ of that time studying for her math test. How many hours did she spend studying for the math test?

G. True or False

1. $\frac{1}{3} \times \frac{1}{5} = \frac{1}{8}$

2. To multiply mixed numbers, you can multiply the whole numbers first and then multiply the fractions.

3. The product of two proper fractions is always smaller than either of the original fractions.

4. $4 \times \frac{3}{8} = \frac{12}{32}$

5. $\frac{21}{2} \times 2 = 5$