

**Products of Top Heavy Fractions and Integers - Guided Lesson Explanation****Explanation to #1**

To multiply a fraction by a whole number, write the whole number as a fraction with same numerator and 1 as the denominator

Write 3 as a fraction.

$$3 = \frac{3}{1}$$

Multiply the numerators then multiply the denominators. Simplify the answer.

$$\frac{9}{2} \times 3 = \frac{9 \times 3}{2 \times 1} = \frac{27}{2} = 13 \frac{1}{2}$$

This answer is in simplest form.

**Explanation to #2**

$$\frac{4}{7} \times \square = \frac{32}{56}$$

The bottom number of a fraction, the denominator, tells how many equal parts we want to divide the whole number into. The top number, called the numerator, tells how many of the denominator's parts we have to work with.

If we divide the numerator and denominator by the fraction, we can determine the missing parts.

$$\text{Numerator} = 32 \div 4 = 8$$

$$\text{Denominator} = 56 \div 7 = 8$$

$\frac{8}{8}$  will be the missing fraction.



**Explanation to #3**

a. Step 1) First we look to see what is being asked of us.

$$\frac{7}{1} \times 4$$

To multiply a fraction by a whole number, write the whole number as a fraction with same numerator and 1 as the denominator.

Write 4 as a fraction.

$$4 = \frac{4}{1}$$

Multiply the numerators then multiply the denominators. Simplify the answer.

$$\frac{7}{1} \times 4 = \frac{7 \times 4}{1 \times 1} = \frac{28}{1} = 28 \quad \text{This answer is in simplest form.}$$

b. Step 1) First we look to see what is being asked of us.

$$8 \times \frac{5}{6}$$

To multiply a fraction by a whole number, write the whole number as a fraction with same numerator and 1 as the denominator.

Write 8 as a fraction.

$$8 = \frac{8}{1}$$

Multiply the numerators then multiply the denominators. Simplify the answer.

$$8 \times \frac{5}{6} = \frac{8 \times 5}{1 \times 6} = \frac{40}{6} = 6 \frac{4}{6} = 6 \frac{2}{3}$$

This answer is in simplest form.

