

Name \_\_\_\_\_

Date \_\_\_\_\_

### Multiplication and Division of Rational Numbers - Step-by-Step Lesson

1. Which of the following fractions is equivalent to  $\frac{-6}{4}$ ?

a.  $\frac{8}{-12}$     b.  $\frac{-36}{24}$     c.  $\frac{-6}{-4}$

2. What integer would make this sentence true?

\_\_\_\_\_  $\times -5 = -40$



#### Explanation:

1. )We can simplify all the fractions to see which, in its simplest form, is equal to:  $\frac{-6}{4} = \frac{-3}{2}$

a.  $\frac{8}{-12} = \frac{3}{-4}$

b.  $\frac{-36}{24} = \frac{-3}{2}$

c.  $\frac{-6}{-4} = \frac{-3}{-2}$

**b is the right answer**  $\frac{-36}{24}$ . In their simplest form, they both equal  $\frac{-3}{2}$ .

b) Remember that: positive  $\times$  negative = negative

So our missing number must be positive. Then we ask ourselves what can we multiply 5 by to get 40.

We can multiple -5 by 8

$8 \times -5 = -40$

The number 8 gives the correct result of -40, so the answer is 8.

