

**Multiplication and Division of Rational Numbers - Guided Lesson Explanation****Explanation#1**

Apply the distributive property:

$$8(6t + 2)$$

$$8(6t) + 8(2)$$

$$48t + 16 \quad \text{There are no like terms to combine.}$$

**Explanation#2**

The fraction  $\frac{3}{-7}$  is already in its simplest form. Reduce all the other fractions to see which fraction is equivalent to it.

We will find that choice a is an equivalent fraction:

$$\frac{9}{-21} = \frac{3}{-7}$$

b is the right answer  $\frac{9}{-21}$

**Explanation#3**

In order to get a positive product from a negative number, we know that the equation must follow this pattern:

negative  $\times$  negative = positive (Our answer must be negative.)

Now we need to determine what times 2 equals 18. We can call the blank (m). So now it looks like:

$$m \times -2 = 18 \quad (\text{To get } m \text{ by itself, we can divide both sides by } -2)$$

$$m = 18 \div -2 \quad m = -9$$

The number -9 gives the correct result of 18, so the answer is -9.

