# Math Foundations: Fractions - Multiplication and Division Take Away Practice – Answer Key

### Part 1: Multiply the Fractions

Remember, when you multiply fractions, you multiply across. Slide!

1) 
$$\frac{4}{2} \times \frac{5}{10} = \frac{20}{20} = 1$$

2) 
$$\frac{5}{2} \times \frac{7}{3} = \frac{35}{6}$$

3) 
$$\frac{1}{2} \times \frac{1}{4} = \frac{1}{8}$$

4) 
$$\frac{2}{3} \times \frac{3}{4} = \frac{6}{12} = \frac{1}{2}$$

5) 
$$\frac{1}{3} \times 3 = \frac{3}{3} = 1$$

6) 
$$8 \times \frac{1}{7} = \frac{8}{7}$$

(not expecting simplification here but if you did it, the simplification is the answer after the red equal sign :D)

#### Part 2: Divide the Fractions

Remember, when you divide fractions, you **K**EEP the first fraction unchanged, **F**LIP the second fraction, and **C**HANGE the sign from division to multiplication, and proceed to multiply the fractions.

1) 
$$\frac{4}{2} \div \frac{5}{10} = \frac{40}{10} = 4$$

2) 
$$\frac{5}{3} \div \frac{5}{3} = \frac{15}{15} = 1$$

3) 
$$\frac{1}{3} \div \frac{4}{9} = \frac{9}{12} = \frac{3}{4}$$

4) 
$$\frac{4}{3} \div \frac{3}{2} = \frac{9}{8}$$

$$5) \ \frac{1}{8} \div 3 = \frac{1}{24}$$

6) 
$$2 \div \frac{1}{7} = \frac{14}{1} = 14$$

## Part 3: Solve and Simplify

Remember, when you simplify, you can cancel something in the numerator with the same thing in the denominator.

1) 
$$\frac{4}{2} \times \frac{5}{10} = 1$$

2) 
$$\frac{5}{3} \div \frac{5}{3} = 1$$

3) 
$$\frac{1}{2} \times \frac{1}{4} = \frac{1}{8}$$

4) 
$$\frac{1}{8} \div 3 = \frac{1}{24}$$

5) 
$$\frac{1}{3} \times 5 = \frac{5}{3}$$

6) 
$$2 \div \frac{1}{7} = 14$$

## Part 4: Simplify Then Solve (Bonus)

Remember, when you simplify, you can cancel something in the numerator with the same thing in the denominator. AND you can do it on the original fractions before solving.

1) 
$$\frac{4}{2} \times \frac{5}{10} = \frac{2}{1} \times \frac{1}{2} = \frac{2}{2} = 1$$

2) 
$$\frac{5}{3} \div \frac{5}{10} = \frac{5}{3} \times \frac{2}{1} = \frac{10}{3}$$

3) 
$$\frac{2}{2} \times \frac{1}{4} = \frac{1}{1} \times \frac{1}{4} = \frac{1}{4}$$

4) 
$$\frac{3}{9} \div 3 = \frac{1}{3} \times \frac{1}{3} = \frac{1}{9}$$

5) 
$$\frac{15}{3} \times 5 = \frac{5}{1} \times \frac{5}{1} = \frac{25}{1} = 25$$

6) 
$$2 \div \frac{7}{14} = \frac{2}{1} \times \frac{2}{1} = \frac{4}{1} = 4$$