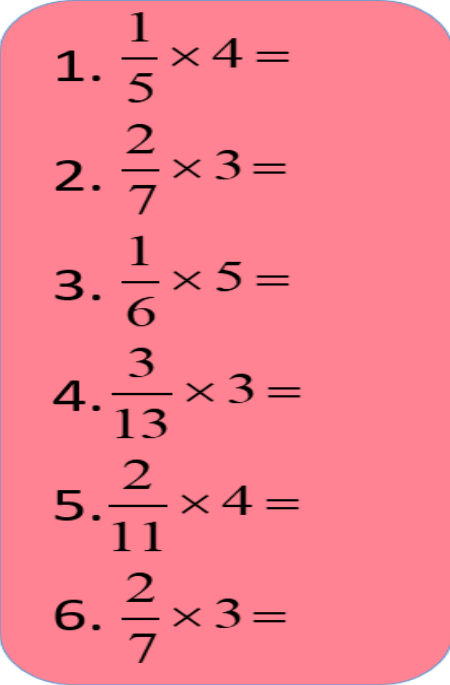


	Learning Objective and what to include	Teaching and Models	Task and expected outcomes
1	<p>Learning Question: Can I multiply a fraction by an integer?</p> <p>Steps to success:</p> <ul style="list-style-type: none"> <li>• First we turn the integer into a fraction. <math>4 = \frac{4}{1}</math></li> <li>• Next we simply use our knowledge of multiplying fractions. We multiply the numerator by the numerator and the denominator by the denominator.</li> </ul> $\frac{2}{9} \times \frac{4}{1} = \frac{8}{9}$	$\frac{1}{4} \times 3 = \frac{1}{4} \times \frac{3}{1} = \frac{3}{4}$ <p>We make 3 become <math>\frac{3}{1}</math> because then we can multiply the two fractions together where we very simply times the numerator by the numerator <math>1 \times 3 = 3</math> and times the denominator by the denominator <math>4 \times 1 = 4</math></p> <p>Our answer is <math>\frac{3}{4}</math></p>	 <ol style="list-style-type: none"> <li><math>\frac{1}{5} \times 4 =</math></li> <li><math>\frac{2}{7} \times 3 =</math></li> <li><math>\frac{1}{6} \times 5 =</math></li> <li><math>\frac{3}{13} \times 3 =</math></li> <li><math>\frac{2}{11} \times 4 =</math></li> <li><math>\frac{2}{7} \times 3 =</math></li> </ol> <p>If you would like to do your own work that is absolutely fine. I have set work on Purple Mash and Mathletics that is related</p>

			to this topic for each lesson.
2	<p>Learning Question: Can I compare and order fractions?</p> <p>Steps to Success</p> <p>Find the common denominator</p> <p>Multiply fractions to make the denominators the same</p> <p>Compare the numerators. If the numerator is bigger then the fraction is bigger.</p>	<p>Compare these fractions:</p> <p>Common denominator: 8 and 12 both go into 24</p> <p>Make denominators the same: 8 needs to be multiplied by 3</p> <p>12 needs to be multiplied by 2</p> <p>Compare numerators: 10 is bigger than 9 therefore 5/12 is bigger than 3/8</p>	<p>1 ) <math>\frac{9}{11}</math> <input type="checkbox"/> <math>\frac{1}{2}</math></p> <p>2 ) <math>\frac{1}{3}</math> <input type="checkbox"/> <math>\frac{2}{11}</math></p> <p>3 ) <math>\frac{8}{12}</math> <input type="checkbox"/> <math>\frac{2}{5}</math></p> <p>4 ) <math>\frac{1}{6}</math> <input type="checkbox"/> <math>\frac{2}{3}</math></p> <p>5 ) <math>\frac{3}{12}</math> <input type="checkbox"/> <math>\frac{1}{6}</math></p> <p>6 ) <math>\frac{2}{7}</math> <input type="checkbox"/> <math>\frac{5}{10}</math></p> <p>7 ) <math>\frac{2}{8}</math> <input type="checkbox"/> <math>\frac{1}{2}</math></p> <p>8 ) <math>\frac{2}{11}</math> <input type="checkbox"/> <math>\frac{1}{9}</math></p>

**Learning Question:** Can I find a fraction of an amount?

**Steps to Success**

1. First, divide the total amount by your denominator.
2. Then, multiply the answer by the numerator.

**Example: Find  $\frac{2}{5}$  of 20**

$$20 \div 5 = 4$$

$$4 \times 2 = 8$$

**$\frac{2}{5}$  of 20 is 8**

- 1) Find  $\frac{1}{4}$  of these amounts  
a) 20   b) 40   c) 120   d) 36
- 2) Find the following fractions of 100.  
a)  $\frac{1}{2}$    b)  $\frac{1}{4}$    c)  $\frac{1}{10}$    d)  $\frac{1}{5}$
- 3) I have £180 find:  
a)  $\frac{1}{6}$  of £180   b)  $\frac{2}{6}$  of £180   c)  $\frac{5}{6}$  of £180
- 4) Which is bigger? Find the fractions of the amounts to find out.  
a)  $\frac{3}{5}$  of 25 or  $\frac{2}{3}$  of 18?  
  
b)  $\frac{4}{7}$  of 49 or  $\frac{5}{6}$  of 36?  
  
c)  $\frac{3}{11}$  of 55 or  $\frac{1}{3}$  of 45
- 5) Find  $\frac{3}{7}$  of these amounts:  
a) 14   b) 84   c) 700   d) 0.7
- 6) Which is bigger?  $\frac{6}{10}$  of 70 or  $\frac{3}{5}$  of 70?  
Explain your answer.
- 7) When do you need to be able to find a fraction of an amount in real life? Give two examples.

4

Learning Question: Can I convert mixed numbers into improper fractions?

Multiply the whole number by the denominator and add the numerator.

Keep the same denominator.

Then add.

$$4\frac{1}{3} = \frac{13}{3}$$

Multiply.

$$1\frac{3}{6} = \frac{9}{6}$$

Diagram illustrating the conversion of the mixed number  $1\frac{3}{6}$  to the improper fraction  $\frac{9}{6}$ . The whole number 1 is multiplied by the denominator 6 to get 6. The numerator 3 is added to 6 to get 9. The denominator 6 remains the same.

Convert.

1.  $7\frac{3}{5} =$  \_\_\_\_\_ 2.  $6\frac{5}{8} =$  \_\_\_\_\_ 3.  $9\frac{2}{10} =$  \_\_\_\_\_

4.  $2\frac{2}{4} =$  \_\_\_\_\_ 5.  $6\frac{1}{9} =$  \_\_\_\_\_ 6.  $5\frac{5}{7} =$  \_\_\_\_\_

7.  $3\frac{1}{8} =$  \_\_\_\_\_ 8.  $3\frac{3}{12} =$  \_\_\_\_\_ 9.  $6\frac{1}{11} =$  \_\_\_\_\_

10.  $4\frac{3}{4} =$  \_\_\_\_\_ 11.  $8\frac{9}{12} =$  \_\_\_\_\_ 12.  $9\frac{2}{8} =$  \_\_\_\_\_

## Improper fractions to mixed numbers:

15 The numerator represents how many parts you have in total.

7 The denominator represents the 'equal parts' that the whole is divided into.

$$\frac{15}{7} = 2\frac{1}{7}$$

Consider  $\frac{7}{7} = 1$  so  $\frac{14}{7} = 2$

That leaves

$$\frac{15}{7} - \frac{14}{7} = \frac{1}{7}$$

Convert.

1.  $\frac{113}{12} =$  \_\_\_\_\_ 2.  $\frac{19}{2} =$  \_\_\_\_\_ 3.  $\frac{36}{10} =$  \_\_\_\_\_

4.  $\frac{75}{12} =$  \_\_\_\_\_ 5.  $\frac{50}{8} =$  \_\_\_\_\_ 6.  $\frac{52}{10} =$  \_\_\_\_\_

7.  $\frac{13}{3} =$  \_\_\_\_\_ 8.  $\frac{39}{4} =$  \_\_\_\_\_ 9.  $\frac{68}{10} =$  \_\_\_\_\_

10.  $\frac{27}{5} =$  \_\_\_\_\_ 11.  $\frac{53}{8} =$  \_\_\_\_\_ 12.  $\frac{72}{10} =$  \_\_\_\_\_