

# **What are Equivalent Fractions?**

#### FREE Worksheet - 1

Time: 20 minutes

(Detailed solutions at the end)

1. Find the missing number:

$$\frac{2}{12} = \frac{?}{30}$$

Answer: \_\_\_\_

2. Find the missing number:

$$\frac{2}{7} = \frac{12}{?}$$

Answer: \_\_\_\_

3. Find the missing number:

$$\frac{?}{4} = \frac{12}{24}$$

Answer: \_\_\_\_

4. Write any equivalent fraction of  $\frac{1}{4}$ 

Answer: \_\_\_\_

5. Write any equivalent fraction of  $\frac{4}{5}$ 

Answer: \_\_\_\_

6. Find the missing number:

$$\frac{4}{?} = \frac{32}{80}$$

Answer: \_\_\_\_

7. Write any equivalent fraction of  $\frac{4}{6}$ 

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	Answer:

## **SOLUTIONS**

## Problem 1

\_\_\_\_\_The denominator, 5, is multiplied by 6 to get 30.

So, we must also multiply the numerator, 1, by 6 to get an equivalent fraction.

$$\frac{1 \times 6}{5 \times 6} = \frac{6}{30}$$

So, the missing number is 6.

## Problem 2

The numerator, 2, is multiplied by 6 to get 12.

So, we must also multiply the denominator, 7, by 6 to get an equivalent fraction.

$$\frac{2 \times 6}{7 \times 6} = \frac{12}{42}$$

So, the missing number is 42.



#### **Problem 3**

The denominator, 24, is divided by 6 to get 4.

So, we must also divide the numerator, 12, by 6 to get an equivalent fraction.

$$\frac{12 \div 6}{24 \div 6} = \frac{2}{4}$$

So, the missing number is 2.

### **Problem 4**

To get an equivalent fraction of  $\frac{1}{4}$ , we multiply its numerator and denominator by the same number.

Examples:

$$\frac{1\times2}{4\times2} = \frac{2}{8}$$

$$\frac{1\times3}{4\times3} = \frac{3}{12}$$

The first 8 equivalent fractions of  $\frac{1}{4}$  by multiplying both 1 and 4 by

2, 3, ......9 are:

$$\frac{1}{4} = \frac{2}{8} = \frac{3}{12} = \frac{4}{16} = \frac{5}{20} = \frac{6}{24} = \frac{7}{28} = \frac{8}{32} = \frac{9}{36}$$

#### **Problem 5**

To get an equivalent fraction of  $\frac{4}{5}$ , we multiply its numerator and denominator by the same number.

**Examples:** 

$$\frac{4\times2}{5\times2} = \frac{8}{10}$$

$$\frac{4\times3}{5\times3} = \frac{12}{15}$$

The first 8 equivalent fractions of  $\frac{4}{5}$  by multiplying both 4 and 5 by

2, 3, .....9 are:

$$\frac{4}{5} = \frac{8}{10} = \frac{12}{15} = \frac{16}{20} = \frac{20}{25} = \frac{24}{30} = \frac{28}{35} = \frac{32}{40} = \frac{36}{45}$$

#### **Problem 6**

\_\_\_\_The numerator, 32, is divided by 8 to get 4.

So, we must also divide the denominator, 80, by 8 to get an equivalent fraction.

$$\frac{32 \div 8}{80 \div 8} = \frac{4}{10}$$

So, the missing number is 10.

#### **Problem 7**

To get an equivalent fraction of  $\frac{4}{6}$ , we multiply its numerator and denominator by the same number.

Examples:

$$\frac{4\times2}{6\times2} = \frac{8}{12}$$

$$\frac{4 \times 3}{6 \times 3} = \frac{12}{18}$$

The first 8 equivalent fractions of  $\frac{4}{6}$  by multiplying both 4 and 5 by

2, 3, .....9 are:

$$\frac{4}{6} = \frac{8}{12} = \frac{12}{18} = \frac{16}{24} = \frac{20}{30} = \frac{24}{36} = \frac{28}{42} = \frac{32}{48} = \frac{36}{54}$$