

## Equivalent Fractions

Date \_\_\_\_\_ Period \_\_\_\_\_

**True or False - The fractions are equivalent.**

1)  $\frac{1}{6}$  and  $\frac{5}{12}$

2)  $\frac{7}{5}$  and  $\frac{28}{20}$

3)  $\frac{4}{3}$  and  $\frac{20}{15}$

4)  $\frac{1}{4}$  and  $\frac{5}{8}$

5)  $\frac{7}{5}$  and  $\frac{21}{15}$

6)  $\frac{2}{7}$  and  $\frac{6}{21}$

7)  $\frac{4}{9}$  and  $\frac{8}{27}$

8)  $\frac{1}{7}$  and  $\frac{2}{7}$

9)  $\frac{7}{2}$  and  $\frac{28}{8}$

**True or False - The fractions are equivalent.**

1)  $\frac{1}{6}$  and  $\frac{5}{12}$

Answer: No

2)  $\frac{7}{5}$  and  $\frac{28}{20}$

Answer: Yes

3)  $\frac{4}{3}$  and  $\frac{20}{15}$

Answer: Yes

4)  $\frac{1}{4}$  and  $\frac{5}{8}$

Answer: No

5)  $\frac{7}{5}$  and  $\frac{21}{15}$

Answer: Yes

6)  $\frac{2}{7}$  and  $\frac{6}{21}$

Answer: Yes

7)  $\frac{4}{9}$  and  $\frac{8}{27}$

Answer: No

8)  $\frac{1}{7}$  and  $\frac{2}{7}$

Answer: No

9)  $\frac{7}{2}$  and  $\frac{28}{8}$

Answer: Yes

**Solution Steps**

1)  $\frac{1}{6}$  and  $\frac{5}{12}$

First, write each fraction in lowest terms

The greatest common divisor of 1 and 6 is 1, so  $\frac{1}{6}$

is already in lowest terms

The greatest common divisor of 5 and 12 is 1, so  $\frac{5}{12}$

is already in lowest terms

$\frac{1}{6}$  is not equal to  $\frac{5}{12}$

2)  $\frac{7}{5}$  and  $\frac{28}{20}$

First, write each fraction in lowest terms

The greatest common divisor of 7 and 5 is 1, so  $\frac{7}{5}$

is already in lowest terms

$\frac{28}{20}$  can be reduced, since 4 is a factor of both 28 and

$$\frac{28}{20} \div \frac{4}{4} = \frac{7}{5}$$

The fraction is now in lowest terms

$\frac{7}{5}$  is equal to  $\frac{28}{20}$

3)  $\frac{4}{3}$  and  $\frac{20}{15}$

First, write each fraction in lowest terms

The greatest common divisor of 4 and 3 is 1, so  $\frac{4}{3}$

is already in lowest terms

$\frac{20}{15}$  can be reduced, since 5 is a factor of both 20 and

$$\frac{20}{15} \div \frac{5}{5} = \frac{4}{3}$$

The fraction is now in lowest terms

$\frac{4}{3}$  is equal to  $\frac{20}{15}$

4)  $\frac{1}{4}$  and  $\frac{5}{8}$

First, write each fraction in lowest terms

The greatest common divisor of 1 and 4 is 1, so  $\frac{1}{4}$

is already in lowest terms

The greatest common divisor of 5 and 8 is 1, so  $\frac{5}{8}$

is already in lowest terms

$\frac{1}{4}$  is not equal to  $\frac{5}{8}$

5)  $\frac{7}{5}$  and  $\frac{21}{15}$

First, write each fraction in lowest terms

The greatest common divisor of 7 and 5 is 1, so  $\frac{7}{5}$

is already in lowest terms

$\frac{21}{15}$  can be reduced, since 3 is a factor of both 21 and

$$\frac{21}{15} \div \frac{3}{3} = \frac{7}{5}$$

The fraction is now in lowest terms

$\frac{7}{5}$  is equal to  $\frac{21}{15}$

6)  $\frac{2}{7}$  and  $\frac{6}{21}$

First, write each fraction in lowest terms

The greatest common divisor of 2 and 7 is 1, so  $\frac{2}{7}$

is already in lowest terms

$\frac{6}{21}$  can be reduced, since 3 is a factor of both 6 and 21:

$$\frac{6}{21} \div \frac{3}{3} = \frac{2}{7}$$

The fraction is now in lowest terms

$\frac{2}{7}$  is equal to  $\frac{6}{21}$

$$7) \frac{4}{9} \text{ and } \frac{8}{27}$$

First, write each fraction in lowest terms

The greatest common divisor of 4 and 9 is 1, so  $\frac{4}{9}$

is already in lowest terms

The greatest common divisor of 8 and 27 is 1, so  $\frac{8}{27}$

is already in lowest

terms

$\frac{4}{9}$  is not equal to  $\frac{8}{27}$

$$8) \frac{1}{7} \text{ and } \frac{2}{7}$$

First, write each fraction in lowest terms

The greatest common divisor of 1 and 7 is 1, so  $\frac{1}{7}$

is already in lowest terms

The greatest common divisor of 2 and 7 is 1, so  $\frac{2}{7}$

is already in lowest terms

$\frac{1}{7}$  is not equal to  $\frac{2}{7}$

$$9) \frac{7}{2} \text{ and } \frac{28}{8}$$

First, write each fraction in lowest terms

The greatest common divisor of 7 and 2 is 1, so  $\frac{7}{2}$

is already in lowest terms

$\frac{28}{8}$  can be reduced, since 4 is a factor of both 28 and 8:

$$\frac{28}{8} \div \frac{4}{4} = \frac{7}{2}$$

The fraction is now in lowest terms

$\frac{7}{2}$  is equal to  $\frac{28}{8}$