Equivalent Fractions

True or False - The fractions are equivalent.

1)
$$\frac{7}{5}$$
 and $\frac{28}{20}$

2)
$$\frac{3}{5}$$
 and $\frac{4}{5}$

3)
$$\frac{8}{3}$$
 and $\frac{8}{5}$

4)
$$\frac{1}{4}$$
 and $\frac{2}{8}$

5)
$$\frac{3}{5}$$
 and $\frac{12}{20}$

6)
$$\frac{3}{8}$$
 and $\frac{12}{32}$

7)
$$\frac{9}{2}$$
 and $\frac{18}{4}$

8)
$$\frac{5}{7}$$
 and $\frac{2}{7}$

9)
$$\frac{5}{7}$$
 and $\frac{25}{28}$

Equivalent Fractions

Date_____Period____

True or False - The fractions are equivalent.

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

Answer: Yes

2) $\frac{3}{5}$ and $\frac{4}{5}$

Answer: No

3) $\frac{8}{3}$ and $\frac{8}{5}$

Answer: No

4) $\frac{1}{4}$ and $\frac{2}{8}$

Answer: Yes

5) $\frac{3}{5}$ and $\frac{12}{20}$

Answer: Yes

6) $\frac{3}{8}$ and $\frac{12}{32}$

Answer: Yes

7) $\frac{9}{2}$ and $\frac{18}{4}$

Answer: Yes

8) $\frac{5}{7}$ and $\frac{2}{7}$

Answer: No

9) $\frac{5}{7}$ and $\frac{25}{28}$

Answer: No

Solution Steps

1)
$$\frac{7}{5}$$
 and $\frac{28}{20}$

First, write each fraction in lowest terms The greatest common divisor of 7 and 5 is 1, so $\frac{1}{5}$ is already in lowest terms $\overline{20}$ can be reduced, since 4

is a factor of both 28 and

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

The fraction is now in lowest terms 28 $\overline{5}$ is equal to $\overline{20}$

4)
$$\frac{1}{4}$$
 and $\frac{2}{8}$

 $\frac{\pi}{4}$ is equal to $\frac{\pi}{8}$

First, write each fraction in lowest terms The greatest common divisor of 1 and 4 is 1, so $\frac{\pi}{4}$ is already in lowest terms $\overline{8}$ can be reduced, since 2is a factor of both 2 and 8: $\frac{1}{8} \div \frac{1}{2} = \frac{1}{4}$ The fraction is now in lowest terms

2)
$$\frac{3}{5}$$
 and $\frac{4}{5}$

First, write each fraction in lowest terms The greatest common divisor of 3 and 5 is 1, so $\overline{5}$ is already in lowest terms The greatest common divisor of 4 and 5 is 1, so $\overline{5}$ is already in lowest terms $\overset{4}{3}$ $\frac{1}{5}$ is not equal to $\frac{1}{5}$

5)
$$\frac{3}{5}$$
 and $\frac{12}{20}$

First, write each fraction in lowest terms The greatest common divisor of 3 and 5 is 1, so $\overline{5}$ is already in lowest terms $\overline{20}$ can be reduced, since 4is a factor of both 12 and 20: 12 4 $\overline{20} \div \overline{4} = \overline{5}$

The fraction is now in lowest terms
$$\frac{3}{5}$$
 is equal to $\frac{20}{5}$

3)
$$\frac{8}{3}$$
 and $\frac{8}{5}$

First, write each fraction in lowest terms The greatest common divisor of 8 and 3 is 1, so $\overline{\bf 3}$ is already in lowest terms The greatest common divisor of 8 and 5 is 1, so $\overline{5}$ is already in lowest terms $\frac{1}{3}$ is not equal to $\frac{1}{5}$

6)
$$\frac{3}{8}$$
 and $\frac{12}{32}$

First, write each fraction in lowest terms The greatest common divisor of 3 and 8 is 1, so $\frac{1}{8}$ is already in lowest terms $\overline{32}$ can be reduced, since 4is a factor of both 12 and

$$\frac{12}{32} \div \frac{4}{4} = \frac{3}{8}$$

The fraction is now in $3 \qquad 12$ $\frac{1}{8}$ is equal to $\frac{1}{32}$

7)
$$\frac{9}{2}$$
 and $\frac{18}{4}$

First, write each fraction in lowest terms The greatest common $\frac{9}{2}$ divisor of 9 and 2 is 1, so $\frac{1}{2}$ is already in lowest terms $\frac{18}{4}$ can be reduced, since 2 is a factor of both 18 and 4: $\frac{18}{4} \div \frac{2}{2} = \frac{9}{2}$ The fraction is now in lowest terms $\frac{9}{2}$ is equal to $\frac{18}{4}$

8)
$$\frac{5}{7}$$
 and $\frac{2}{7}$

First, write each fraction in lowest terms
The greatest common
divisor of 5 and 7 is 1, so $\frac{5}{7}$ is already in lowest terms
The greatest common
divisor of 2 and 7 is 1, so $\frac{2}{7}$ is already in lowest terms $\frac{5}{7}$ is not equal to $\frac{2}{7}$

9)
$$\frac{5}{7}$$
 and $\frac{25}{28}$

First, write each fraction in lowest terms
The greatest common
divisor of 5 and 7 is 1, so $\frac{5}{7}$ is already in lowest terms
The greatest common
divisor of 25 and 28 is 1, so $\frac{25}{28}$ is already in lowest
terms $\frac{25}{7}$ is not equal to $\frac{25}{28}$