## Equivalent Fractions

Use multiplication to find an equivalent fraction:
$\frac{3}{7} \times \frac{4}{4}=\frac{12}{28}$
$\frac{3}{7}=\frac{12}{28}$
Use division to find an equivalent fraction.
$\frac{10}{12} \div \frac{2}{2}=\frac{10 \div 2}{12 \div 2}=\frac{5}{6}$
$\frac{10}{12}=\frac{5}{6}$

Equivalent fractions name the same amount.

| $\frac{1}{2}$ |  |  |
| :---: | :---: | :---: |
| $\frac{1}{6}$ | $\frac{1}{6}$ | $\frac{1}{6}$ |

$$
\frac{1}{2}=\frac{3}{6}
$$

Use multiplication to find an equivalent fraction.

1. $\frac{3}{8}$
2. $\frac{1}{3}$
3. $\frac{4}{7}$
4. $\frac{1}{2}$
5. $\frac{5}{9}$
6. $\frac{3}{10}$
7. $\frac{8}{11}$
8. $\frac{7}{16}$
9. $\frac{11}{12}$

Use division to find an equivalent fraction.
10. $\frac{15}{20}$
11. $\frac{4}{18}$
12. $\frac{15}{60}$
13. $\frac{32}{40}$
14. $\frac{80}{100}$
15. $\frac{35}{45}$
16. $\frac{15}{75}$
17. $\frac{32}{48}$
18. $\frac{18}{32}$

Find two equivalent fractions for each given fraction.
19. $\frac{3}{6}$
20. $\frac{3}{9}$
21. $\frac{10}{12}$
22. $\frac{75}{100}$
23. $\frac{1}{2}$
24. $\frac{7}{12}$
25. $\frac{6}{8}$
26. $\frac{20}{24}$
27. $\frac{1}{8}$
$\qquad$
28. Why do you have to multiply or divide both the numerator and denominator of a fraction to find an equivalent fraction?
$\qquad$

## Equivalent Fractions

Find two fractions equivalent to each fraction.

1. $\frac{5}{6}$
2. $\frac{10}{20}$
3. $\frac{45}{60}$ $\qquad$
4. $\frac{28}{32}$ $\qquad$
5. $\frac{20}{8}$
6. $\frac{16}{32}$ $\qquad$
7. $\frac{36}{60}$
$\qquad$ 8. $\frac{16}{48}$
8. $\frac{2}{3}$
9. Are the fractions $\frac{1}{5}, \frac{5}{5}$, and $\frac{5}{1}$ equivalent? Explain.
10. The United States currently has 50 states. What fraction of the states had become a part of the United States by 1795? Write your answer as two equivalent fractions.
11. In what year was the total number of states in the United States $\frac{3}{5}$ the number it was in 1960 ?

## Number of States in the United States

| Year | Number of States |
| :---: | :---: |
| 1795 | 15 |
| 1848 | 30 |
| 1900 | 45 |
| 1915 | 48 |
| 1960 | 50 |

$\qquad$
13. Which of the following pairs of fractions are equivalent?
A $\frac{1}{10}, \frac{3}{33}$
B $\frac{9}{5}, \frac{5}{9}$
C $\frac{5}{45}, \frac{1}{9}$
D $\frac{6}{8}, \frac{34}{48}$
14. In what situation can you use only multiplication to find equivalent fractions to a given fraction? Give an example.

