Name _____

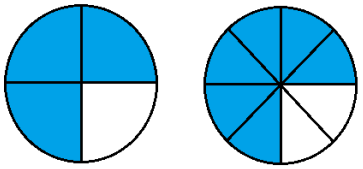
Date _____

Equivalent Fractions

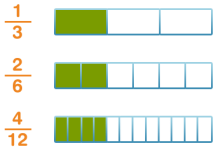
Preparing for Proportions

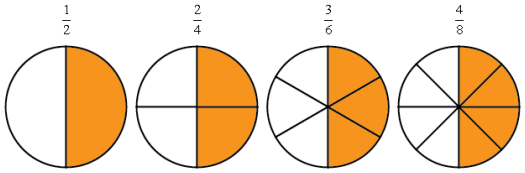
Equivalent Fractions - Fractions that look different but show the same amount.

- Fractions tell what portion of a whole you need, have, or want.
- Equivalent fractions are infinite; they go on forever.
- $\frac{3}{4}$ and $\frac{6}{8}$ are equally shaded, so they are equivalent fractions.



3/4 6/8





- Make equivalent fractions by multiplying or dividing the numerator (top) and denominator (bottom) by the same number.

$\frac{1}{4} \times \frac{2}{2} = \frac{2}{8}$ $\quad \frac{2}{3} \times \frac{7}{7} = \frac{14}{21}$ $\quad \frac{10}{12} \div \frac{2}{2} = \frac{5}{6}$ $\quad \frac{40}{45} \div \frac{5}{5} = \frac{8}{9}$

Choose any number to make an equivalent. Division works best with large fractions that divide evenly.

Write three equivalent fractions for each.

1. $\frac{5}{10} =$ **2.** $\frac{8}{9} =$ **3.** $\frac{10}{30} =$ **4.** $\frac{4}{6} =$

Complete.

5. $\frac{1}{4} \times \_ = \frac{6}{24}$ **6.** $\frac{5}{7} \times \_ = \frac{25}{35}$ **7.** $\frac{15}{27} \div \_ = \frac{5}{9}$ **8.** $\frac{36}{42} \div \_ = \frac{6}{7}$

9. $\frac{6}{12} = \frac{\_}{24}$ **10.** $\frac{2}{8} = \frac{\_}{8}$ **11.** $\frac{\_}{5} = \frac{9}{45}$ **12.** $\frac{4}{\_} = \frac{16}{32}$

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17. $\frac{\_}{15} = \frac{2}{3}$ **18.** $\frac{2}{\_} = \frac{1}{6}$ **19.** $\frac{8}{36} = \frac{\_}{9}$ **20.** $\frac{7}{8} = \frac{21}{\_}$

21. $\frac{5}{8} = \frac{\_}{64}$ **22.** $\frac{25}{40} = \frac{5}{\_}$ **23.** $\frac{\_}{7} = \frac{16}{28}$ **24.** $\frac{3}{\_} = \frac{12}{16}$

25. $\frac{\_}{18} = \frac{5}{9}$ **26.** $\frac{2}{\_} = \frac{22}{33}$ **27.** $\frac{1}{4} = \frac{\_}{64}$ **28.** $\frac{2}{3} = \frac{8}{\_}$

29. $\frac{8}{12} = \frac{\_}{48}$ **30.** $\frac{6}{48} = \frac{1}{\_}$ **31.** $\frac{\_}{5} = \frac{18}{90}$ **32.** $\frac{4}{\_} = \frac{24}{30}$

Claire's Animals

Claire has 32 stuffed animals and 8 of them are named Princess.

a) What fraction of her animals are not named Princess?

b) Write two equivalent fractions.

ANSWER KEY

Equivalent Fractions

Preparing for Proportions

Equivalent Fractions - Fractions that look different but show the same amount.

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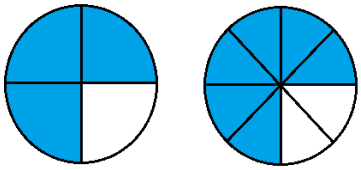
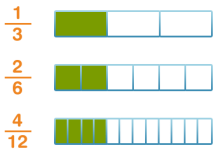
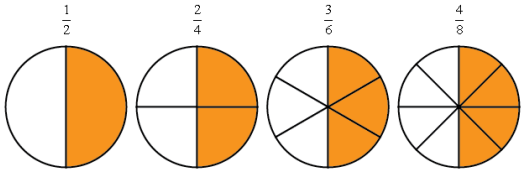


3/4 6/8





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Choose any number to make an equivalent. Division works best with large fractions that divide evenly.

Write three equivalent fractions for each. Answers will vary.

1. $\frac{5}{10} = \frac{1}{2} \frac{10}{20} \frac{15}{30}$ **2.** $\frac{8}{9} = \frac{16}{18} \frac{24}{27} \frac{32}{36}$ **3.** $\frac{10}{30} = \frac{1}{3} \frac{5}{15} \frac{20}{60}$ **4.** $\frac{4}{6} = \frac{2}{3} \frac{8}{12} \frac{12}{18}$

Claire's Animals

Claire has 32 stuffed animals and 8 of them are named Princess.

a) What fraction of her animals are not named Princess?
24/32

b) Write two equivalent fractions.
3/4, 6/8 …

Complete.

5. $\frac{1}{4} \times \frac{6}{6} = \frac{6}{24}$ **6.** $\frac{5}{7} \times \frac{5}{5} = \frac{25}{35}$ **7.** $\frac{15}{27} \div \frac{3}{3} = \frac{5}{9}$ **8.** $\frac{36}{42} \div \frac{6}{6} = \frac{6}{7}$

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