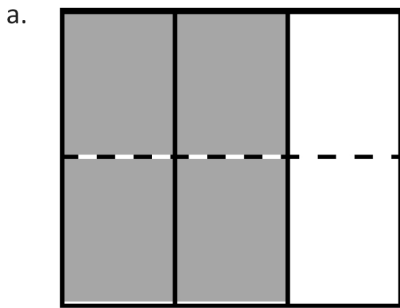


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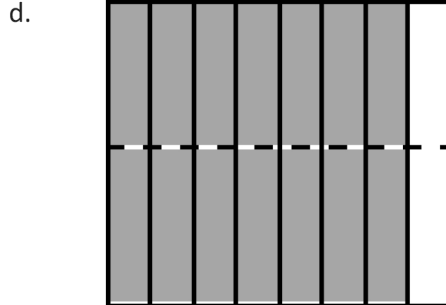
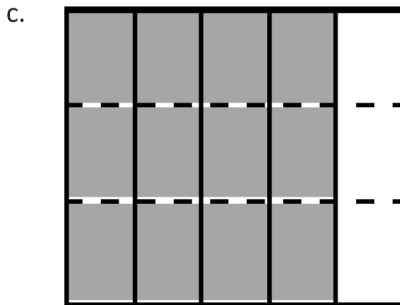
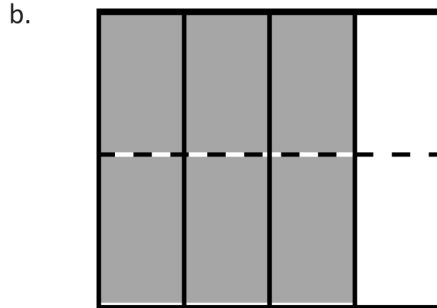
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Each rectangle represents 1.

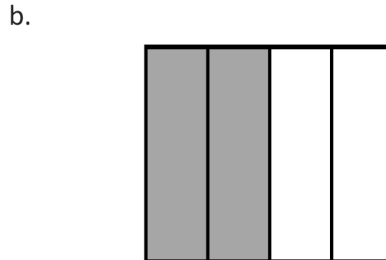
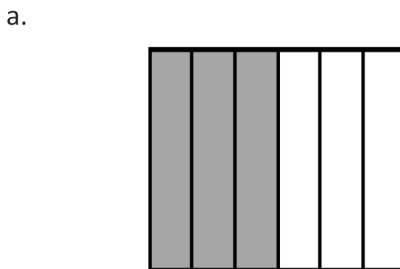
1. The shaded fractions have been decomposed into smaller units. Express the equivalent fractions in a number sentence using multiplication. The first one has been done for you.



$$\frac{2}{3} = \frac{2 \times 2}{3 \times 2} = \frac{4}{6}$$



2. Decompose both shaded fractions into twelfths. Express the equivalent fractions in a number sentence using multiplication.



3. Draw area models to prove that the following number sentences are true.

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

b. $\frac{2}{5} = \frac{4}{10}$

c. $\frac{5}{7} = \frac{10}{14}$

d. $\frac{3}{6} = \frac{9}{18}$

4. Use multiplication to create an equivalent fraction for each fraction below.

a. $\frac{2}{3}$

b. $\frac{5}{6}$

c. $\frac{6}{5}$

d. $\frac{10}{8}$

5. Determine which of the following are true number sentences. Correct those that are false by changing the right-hand side of the number sentence.

a. $\frac{2}{3} = \frac{4}{9}$

b. $\frac{5}{6} = \frac{10}{12}$

c. $\frac{3}{5} = \frac{6}{15}$

d. $\frac{7}{4} = \frac{21}{12}$

Answer Key

1. a. Answer provided
b. $\frac{3}{4} = \frac{3 \times 2}{4 \times 2} = \frac{6}{8}$
c. $\frac{4}{5} = \frac{4 \times 3}{5 \times 3} = \frac{12}{15}$
d. $\frac{7}{8} = \frac{7 \times 2}{8 \times 2} = \frac{14}{16}$
2. a. $\frac{3}{6} = \frac{3 \times 2}{6 \times 2} = \frac{6}{12}$
b. $\frac{2}{4} = \frac{2 \times 3}{4 \times 3} = \frac{6}{12}$
3. a. Area model proves $\frac{1}{3} = \frac{2}{6}$
b. Area model proves $\frac{2}{5} = \frac{4}{10}$
c. Area model proves $\frac{5}{7} = \frac{10}{14}$
d. Area model proves $\frac{3}{6} = \frac{9}{18}$
4. a. Answers will vary.
b. Answers will vary.
c. Answers will vary.
d. Answers will vary.
5. a. False; answers will vary.
b. True
c. False; answers will vary.
d. True