Lesson 7

Problem Set

1. a. Answer provided
   b. $\frac{1}{2} = \frac{1 \times 3}{2 \times 3} = \frac{3}{6}$
   c. $\frac{1}{2} = \frac{1 \times 4}{2 \times 4} = \frac{4}{8}$
   d. $\frac{1}{2} = \frac{1 \times 5}{2 \times 5} = \frac{5}{10}$
2. a. Answers will vary.
   b. Answers will vary.
   c. Answers will vary.
   d. Answers will vary.
   e. The size of the fractional units decreased.
   f. The number of total units increased.
3. a. Area model represents $\frac{1}{3}$ and is decomposed into sixths; $\frac{1}{3} = \frac{1 \times 2}{3 \times 2} = \frac{2}{6}$
   b. Area model represents $\frac{1}{3}$ and is decomposed into ninths; $\frac{1}{3} = \frac{1 \times 3}{3 \times 3} = \frac{3}{9}$
   c. Area model represents $\frac{1}{3}$ and is decomposed into twelfths; $\frac{1}{3} = \frac{1 \times 4}{3 \times 4} = \frac{4}{12}$

Exit Ticket

a. Area model represents $\frac{1}{4}$ and is decomposed into eighths; $\frac{1}{4} = \frac{1 \times 2}{4 \times 2} = \frac{2}{8}$
b. Area model represents $\frac{1}{4}$ and is decomposed into twelfths; $\frac{1}{4} = \frac{1 \times 3}{4 \times 3} = \frac{3}{12}$

Homework

1. a. Answer provided
   b. $\frac{1}{2} = \frac{1 \times 4}{2 \times 4} = \frac{4}{8}$
   c. $\frac{1}{2} = \frac{1 \times 6}{2 \times 6} = \frac{6}{12}$
   d. $\frac{1}{2} = \frac{1 \times 7}{2 \times 7} = \frac{7}{14}$
2. a. Answers will vary.
   b. Answers will vary.
   c. Answers will vary.
   d. Answers will vary.
3. a. Area model shows $\frac{1}{4}$ and is decomposed into eighths; $\frac{1}{4} = \frac{1 \times 2}{4 \times 2} = \frac{2}{8}$
   b. Area model shows $\frac{1}{4}$ and is decomposed into twelfths; $\frac{1}{4} = \frac{1 \times 3}{4 \times 3} = \frac{3}{12}$
   c. Area model shows $\frac{1}{4}$ and is decomposed into sixteenths; $\frac{1}{4} = \frac{1 \times 4}{4 \times 4} = \frac{4}{16}$