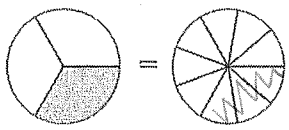
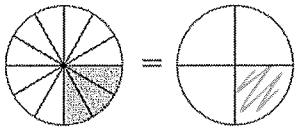
Name: _____ + _____ Date: Key Block: _____

*STEM - Math 8 Notes* *Unit 2 - Fractions*

# Lesson #1-4 Review

1. Shade the model exactly the same and write down the equivalent fraction:

a.  $\frac{1}{3} = \frac{3}{9}$

b.  $\frac{3}{12} = \frac{1}{4}$

2. Circle the equivalent fractions:

$\frac{5}{10} = \frac{15}{30}$ $\frac{10}{10} = \frac{30}{30}$ $\frac{4}{6} = \frac{20}{18}$ $\frac{1}{3} = \frac{2}{6}$

$\frac{7}{8} = \frac{35}{40}$ $\frac{3}{9} = \frac{9}{36}$ $\frac{2}{8} = \frac{10}{40}$ $\frac{4}{5} = \frac{12}{15}$

3. Find the missing numbers in the equivalent fractions below:

a. $\frac{2}{5} = \frac{8}{20}$ b. $\frac{5}{7} = \frac{15}{21}$ c. $\frac{1}{8} = \frac{4}{32}$ d. $\frac{4}{12} = \frac{12}{36}$

4. Reduce each fraction to the lowest terms.

a. $\frac{2}{4} = \frac{1}{2}$ b. $\frac{35}{40} = \frac{7}{8}$ c. $\frac{10}{16} = \frac{5}{8}$ d. $\frac{8}{36} = \frac{2}{9}$

5. Add or subtract the following fractions. Reduce if necessary.

a. $5 \times \frac{7}{4} - \frac{8}{5} \times 4$

$\frac{35}{20} - \frac{32}{20} = \frac{3}{20}$

b. $2 \times \frac{23}{2} + \frac{9}{4}$

$\frac{46}{4} + \frac{9}{4} = \frac{55}{4}$

$= 13\frac{3}{4}$

c. $5 \times \frac{4}{3} - \frac{2}{5} \times 3$

$\frac{20}{15} - \frac{6}{15} = \frac{14}{15}$

d. $7 \times \frac{3}{2} - \frac{9}{7} \times 2$

$\frac{21}{14} - \frac{18}{14} = \frac{3}{14}$

e. $\frac{7}{10} + \frac{2}{5} \times 2$

$\frac{7}{10} + \frac{4}{10} = \frac{11}{10}$

$= 1\frac{1}{10}$

f. $3 \times \frac{5}{2} + \frac{2}{3} \times 2$

$\frac{15}{6} + \frac{4}{6} = \frac{19}{6}$

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

6. Add or subtract the following mixed fractions. Reduce where necessary.

a. $3\frac{1}{2} - 2\frac{2}{3}$

$3 \times \frac{7}{2} - \frac{8}{3} \times 2$

$\frac{21}{6} - \frac{16}{6} = \frac{5}{6}$

b. $3\frac{1}{2} - 2\frac{5}{9}$

$9 \times \frac{7}{2} - \frac{23}{9} \times 2$

$\frac{63}{18} - \frac{46}{18} = \frac{17}{18}$

c. $2\frac{3}{4} + 1\frac{1}{5}$ (×5, ×4)

$3 + \frac{15}{20} + \frac{4}{20}$

$= 3\frac{19}{20}$

d. $3\frac{1}{4} - 2\frac{3}{8}$

$2 \times \frac{13}{4} - \frac{19}{8}$

$\frac{26}{8} - \frac{19}{8} = \frac{7}{8}$

e. $5\frac{1}{2} + 5\frac{1}{4}$

$10\frac{3}{4}$

f. $1\frac{5}{12} + 3\frac{1}{3}$

$4 + \frac{5}{12} + \frac{1}{3} \times 4$

$4 + \frac{5}{12} + \frac{4}{12}$

$4\frac{9}{12}$

$= 4\frac{3}{4}$