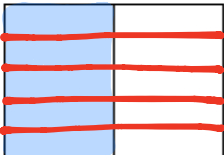
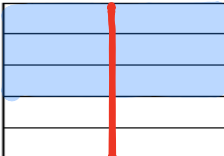
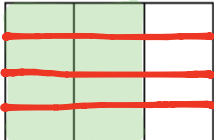
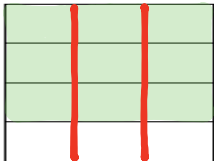
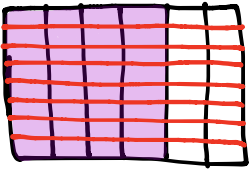
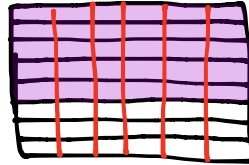
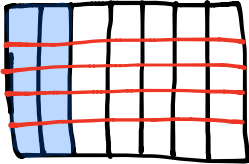
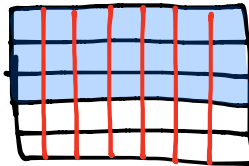
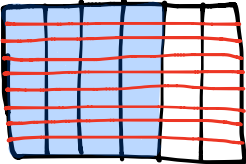
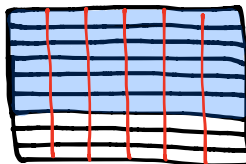
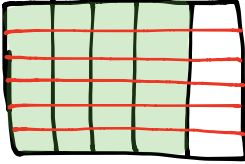
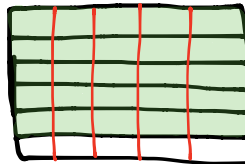


Name _____

Date _____

1. Draw an area model for each pair of fractions, and use it to compare the two fractions by writing $>$, $<$, or $=$ on the line. The first two have been partially done for you. Each rectangle represents 1.

a. $\frac{1}{2}$ _____ $<$ _____ $\frac{3}{5}$ $\frac{1 \times 5}{2 \times 5} = \frac{5}{10}$ $\frac{3 \times 2}{5 \times 2} = \frac{6}{10}$ $\frac{5}{10} < \frac{6}{10}$ so $\frac{1}{2} < \frac{3}{5}$  	b. $\frac{2}{3}$ _____ $<$ _____ $\frac{3}{4}$ $\frac{2}{3} = \frac{2 \times 4}{3 \times 4} = \frac{8}{12}$ $\frac{3}{4} = \frac{3 \times 3}{4 \times 3} = \frac{9}{12}$ $\frac{8}{12} < \frac{9}{12}$, so $\frac{2}{3} < \frac{3}{4}$  
c. $\frac{4}{6}$ _____ $>$ _____ $\frac{5}{8}$ $\frac{4}{6} = \frac{4 \times 8}{6 \times 8} = \frac{32}{48}$ $\frac{5}{8} = \frac{5 \times 6}{8 \times 6} = \frac{30}{48}$ $\frac{32}{48} > \frac{30}{48}$, so $\frac{4}{6} > \frac{5}{8}$  	d. $\frac{2}{7}$ _____ $<$ _____ $\frac{3}{5}$ $\frac{2}{7} = \frac{2 \times 5}{7 \times 5} = \frac{10}{35}$ $\frac{3}{5} = \frac{3 \times 7}{5 \times 7} = \frac{21}{35}$ $\frac{10}{35} < \frac{21}{35}$, so $\frac{2}{7} < \frac{3}{5}$  
e. $\frac{4}{6}$ _____ $=$ _____ $\frac{6}{9}$ $\frac{4}{6} = \frac{4 \times 9}{6 \times 9} = \frac{36}{54}$ $\frac{6}{9} = \frac{6 \times 6}{9 \times 6} = \frac{36}{54}$ $\frac{36}{54} = \frac{36}{54}$, so $\frac{4}{6} = \frac{6}{9}$  	f. $\frac{4}{5}$ _____ $<$ _____ $\frac{5}{6}$ $\frac{4}{5} = \frac{4 \times 6}{5 \times 6} = \frac{24}{30}$ $\frac{5}{6} = \frac{5 \times 5}{6 \times 5} = \frac{25}{30}$ $\frac{24}{30} < \frac{25}{30}$, so $\frac{4}{5} < \frac{5}{6}$  

2. Rename the fractions, as needed, using multiplication in order to compare each pair of fractions by writing $>$, $<$, or $=$.

a. $\frac{2}{3} > \frac{2}{4}$
 $\frac{2}{3} = \frac{2 \times 4}{3 \times 4} = \frac{8}{12}$
 $\frac{2}{4} = \frac{2 \times 3}{4 \times 3} = \frac{6}{12}$

b. $\frac{4}{7} > \frac{1}{2}$
 $\frac{4}{7} = \frac{4 \times 2}{7 \times 2} = \frac{8}{14}$
 $\frac{1}{2} = \frac{1 \times 7}{2 \times 7} = \frac{7}{14}$

c. $\frac{5}{4} > \frac{9}{8}$
 $\frac{5}{4} = \frac{5 \times 8}{4 \times 8} = \frac{40}{32}$
 $\frac{9}{8} = \frac{9 \times 4}{8 \times 4} = \frac{36}{32}$

d. $\frac{8}{12} > \frac{5}{8}$
 $\frac{8}{12} = \frac{8 \times 8}{12 \times 8} = \frac{64}{96}$
 $\frac{5}{8} = \frac{5 \times 12}{8 \times 12} = \frac{60}{96}$

3. Use any method to compare the fractions. Record your answer using $>$, $<$, or $=$.

a. $\frac{8}{9} > \frac{2}{3}$
 $\frac{2}{3} = \frac{2 \times 3}{3 \times 3} = \frac{6}{9}$

b. $\frac{4}{7} < \frac{4}{5}$

c. $\frac{3}{2} = \frac{9}{6}$

d. $\frac{11}{7} < \frac{5}{3}$

$\frac{3}{2} = \frac{3 \times 3}{2 \times 3} = \frac{9}{6}$

$\frac{11}{7} = \frac{11 \times 3}{7 \times 3} = \frac{33}{21}$
 $\frac{5}{3} = \frac{5 \times 7}{3 \times 7} = \frac{35}{21}$

4. Explain which method you prefer using to compare fractions. Provide an example using words, pictures, or numbers.

Answers will vary, but might include ...

- draw tape diagram
- draw number line
- find common denominators
- use benchmarks and logic