Review: Simplifying Fractions

1. ***Simplify in multiple steps — or in just one step!*** Fill in the missing parts.

a.

You could simplify in one step if you divide by the GCF of 40 and 120, which is ____.

$$\frac{40}{120} \overset{\div 10}{=} \frac{\quad}{\quad} \overset{\div 4}{=} \frac{\quad}{\quad}$$

b.

Since 75 and 105 end in 5, they are divisible by 5.

You could simplify in one step if you divide by the GCF of 105 and 75, which is _____.

$$\frac{75}{105} \overset{\div 5}{=} \frac{\quad}{\quad} = \frac{\quad}{\quad}$$

2. The numerator and the denominator have already been factored. Your task is to simplify.

a. $\frac{36}{88} = \frac{4 \times 9}{4 \times 22} =$	**b.** $\frac{98}{126} = \frac{2 \times 49}{2 \times 63} =$	**c.** $\frac{132}{42} = \frac{4 \times 3 \times 11}{6 \times 7} =$
d. $\frac{30 \times 12}{2 \times 3 \times 4} =$	**e.** $\frac{7 \times 22}{11 \times 3} =$	**f.** $\frac{8 \times 10}{16 \times 20}$

3. Some of the following fractions CANNOT be simplified. Simplify the ones you can.

a. $\frac{9}{20}$ **b.** $\frac{14}{27}$ **c.** $\frac{14}{28}$ **d.** $\frac{14}{29}$ **e.** $\frac{8}{22}$ **f.** $\frac{8}{15}$ **g.** $\frac{8}{18}$

h. Why couldn't you simplify some of them? Explain.

4. Simplify the following fractions to the lowest terms.

a. $\frac{27}{60} =$	**b.** $\frac{9}{27} =$	**c.** $\frac{9}{36} =$	**d.** $\frac{24}{32} =$
e. $\frac{60}{200} =$	**f.** $\frac{14}{49} =$	**g.** $\frac{44}{110} =$	**h.** $\frac{27}{90} =$
i. $\frac{42}{50} =$	**j.** $\frac{50}{70} =$	**k.** $\frac{56}{64} =$	**l.** $\frac{24}{64} =$