

Review: Simplifying Fractions

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

<p>a.</p> <p>You could simplify in one step if you divide by the GCF of 40 and 120, which is ____.</p>	<p>b.</p> <p>Since 75 and 105 end in 5, they are divisible by 5.</p> <p>You could simplify in one step if you divide by the GCF of 105 and 75, which is ____.</p>
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$$\frac{40}{120} = \frac{\overset{\div 10}{\quad}}{\underset{\div 10}{\quad}} = \frac{\overset{\div 4}{\quad}}{\underset{\div 4}{\quad}}$$

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

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

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

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.

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