math Antics
Exercises

Name: _____

Date: _____

Simplifying Fractions

1 Simplify this fraction.

$$\frac{6}{30} = \frac{\cancel{2} \times \cancel{3}}{\cancel{2} \times \cancel{3} \times 5} = \frac{1}{5}$$

Or, using the GCF

$$= \frac{\cancel{6}}{5 \times \cancel{6}} = \frac{1}{5}$$

2 Simplify this fraction.

$$\frac{15}{20} = \frac{3 \times \cancel{5}}{2 \times 2 \times \cancel{5}} = \frac{3}{4}$$

3 Simplify this fraction.

$$\frac{8}{48} = \frac{\cancel{2} \times \cancel{2} \times \cancel{2}}{\cancel{2} \times \cancel{2} \times \cancel{2} \times 2 \times 3} = \frac{1}{6}$$

Or, using the GCF

$$= \frac{\cancel{8}}{6 \times \cancel{8}} = \frac{1}{6}$$

4 Simplify this fraction.

$$\frac{9}{36} = \frac{\cancel{3} \times \cancel{3}}{2 \times \cancel{3} \times 2 \times \cancel{3}} = \frac{1}{4}$$

Or, using the GCF

$$= \frac{\cancel{9}}{4 \times \cancel{9}} = \frac{1}{4}$$

5 Simplify this fraction.

$$\frac{49}{84} = \frac{7 \times \cancel{7}}{2 \times 2 \times 3 \times \cancel{7}} = \frac{7}{12}$$

Or, using the GCF

$$= \frac{\cancel{7} \times 7}{\cancel{7} \times 12} = \frac{7}{12}$$

6 Simplify this fraction.

$$\frac{54}{27} = \frac{\cancel{3} \times \cancel{3} \times \cancel{3} \times 2}{\cancel{3} \times \cancel{3} \times \cancel{3}} = \frac{2}{1} = 2$$

Or, using the GCF

$$= \frac{2 \times \cancel{27}}{\cancel{27}} = \frac{2}{1} = 2$$

7 Simplify this fraction.

$$\frac{24}{36} = \frac{\cancel{2} \times \cancel{2} \times 2 \times \cancel{3}}{\cancel{2} \times \cancel{2} \times 3 \times \cancel{3}} = \frac{2}{3}$$

Or, using the GCF

$$= \frac{2 \times \cancel{12}}{3 \times \cancel{12}} = \frac{2}{3}$$

8 Simplify this fraction.

$$\frac{50}{250} = \frac{\cancel{2} \times \cancel{5} \times \cancel{5}}{\cancel{2} \times \cancel{5} \times \cancel{5} \times 5} = \frac{1}{5}$$

Or, using the GCF

$$= \frac{\cancel{50}}{5 \times \cancel{50}} = \frac{1}{5}$$

See Video for step-by-step solutions to each problem.