

Fractions in Simplest Form

Remember:

A fraction is in simplest form if the numerator and denominator have no common factors except 1.

Divide the numerator and denominator by the same number.

$$\frac{42}{48} \div \frac{2}{2} = \frac{42 \div 2}{48 \div 2} = \frac{21}{24}$$

Divide until you cannot divide evenly.

$$\frac{21}{24} \div \frac{3}{3} = \frac{21 \div 3}{24 \div 3} = \frac{7}{8}$$

Find the GCF (greatest common factor). Divide both the numerator and denominator by the GCF.

Factors of 42:

1, 2, 3, 6, 7, 14, 21, 42

Factors of 48:

1, 2, 3, 4, 6, 8, 12, 16, 24, 48

The GCF is 6.

$$\frac{42}{48} \div \frac{6}{6} = \frac{42 \div 6}{48 \div 6} = \frac{7}{8}$$

Use division to write each fraction in simplest form.

1. $\frac{8}{10}$ _____

2. $\frac{14}{20}$ _____

3. $\frac{6}{9}$ _____

4. $\frac{20}{35}$ _____

5. $\frac{16}{24}$ _____

6. $\frac{12}{18}$ _____

7. $\frac{36}{96}$ _____

8. $\frac{45}{60}$ _____

9. $\frac{91}{156}$ _____

10. $\frac{6}{20}$ _____

11. $\frac{21}{105}$ _____

12. $\frac{75}{90}$ _____

Find the GCF of the numerator and denominator.

13. $\frac{6}{16}$ _____

14. $\frac{35}{50}$ _____

15. $\frac{24}{40}$ _____

16. $\frac{28}{32}$ _____

17. $\frac{18}{24}$ _____

18. $\frac{33}{36}$ _____

Use the GCF to write each fraction in simplest form.

19. $\frac{32}{48}$ _____

20. $\frac{21}{56}$ _____

21. $\frac{9}{54}$ _____

22. $\frac{30}{54}$ _____

23. $\frac{21}{36}$ _____

24. $\frac{18}{42}$ _____

25. **Reasoning** Under what circumstances would the GCF be equal to the numerator of a fraction before simplifying?
