



SKILL 12: Simplest Form

A fraction is in simplest form when the only common factor of the numerator and the denominator is 1.

Example 1

Write $\frac{8}{24}$ in simplest form.

Divide the numerator and the denominator by a common factor.

$$\frac{8 \div 2}{24 \div 2} = \frac{4}{12}$$

not in simplest form

→

Continue dividing if there are still common factors (other than 1).

$$\frac{4 \div 4}{12 \div 4} = \frac{1}{3}$$

in simplest form

→

The fraction is in simplest form because the only common factor of 1 and 3 is 1.

$$\frac{8}{24} = \frac{1}{3}$$

Example 2

Write $\frac{36}{42}$ in simplest form.

To write a fraction in simplest form, you can divide the numerator and the denominator by their greatest common factor (GCF).

Factors of 36: 1, 2, 3, 4, 6, 9, 12, 18, 36

Factors of 42: 1, 2, 3, 6, 7, 14, 21, 42

The GCF is 6.

$$\frac{36}{42} = \frac{36 \div 6}{42 \div 6} = \frac{6}{7}$$

$\frac{6}{7}$ is in simplest form.

Guided Practice

1. Write $\frac{4}{10}$ in simplest form.

a. What is the GCF of 4 and 10? _____

b. Divide numerator and denominator by your answer to part a.

$$\frac{4 \div \square}{10 \div \square} = \frac{\square}{\square}$$

2. Write $\frac{32}{40}$ in simplest form. _____

SKILL 12: Practice

Find the GCF of the numerator and denominator in each fraction.
Then write the fraction in simplest form.

1. $\frac{6}{9}$

GCF: _____

Simplest form: _____

2. $\frac{10}{40}$

GCF: _____

Simplest form: _____

3. $\frac{28}{48}$

GCF: _____

Simplest form: _____

Write in simplest form.

4. $\frac{12}{24}$ _____

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

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

7. $\frac{6}{28}$ _____

8. $\frac{18}{20}$ _____

9. $\frac{30}{38}$ _____

10. $\frac{8}{20}$ _____

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

12. $\frac{14}{32}$ _____

13. $\frac{8}{12}$ _____

14. $\frac{12}{16}$ _____

15. $\frac{12}{30}$ _____

16. $\frac{9}{15}$ _____

17. $\frac{6}{42}$ _____

18. $\frac{9}{12}$ _____

19. $\frac{6}{15}$ _____

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

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

22. $\frac{24}{30}$ _____

23. $\frac{21}{28}$ _____

24. $\frac{14}{24}$ _____

25. $\frac{36}{48}$ _____

26. $\frac{16}{52}$ _____

27. $\frac{18}{81}$ _____

28. A kilometer is about $\frac{6}{10}$ of a mile.

Write this fraction in simplest form. _____

29. Last week, $\frac{25}{30}$ of the students in Mr. Lim's class went on a field trip. Write this fraction in simplest form. _____

30. The band members make up $\frac{35}{100}$ students at Winfield Middle School. Write this fraction in simplest form. _____



31. Which is in simplest form?

A $\frac{9}{16}$

C $\frac{9}{18}$

B $\frac{6}{15}$

D $\frac{8}{14}$

Skill 12

32. Which is equivalent to $\frac{5}{8}$?

F $\frac{6}{10}$

H $\frac{3}{4}$

G $\frac{10}{14}$

J $\frac{20}{32}$

Skill 11