Simplifying Fractions

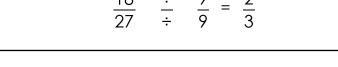
To simplify a fraction, divide the numerator and the denominator by the greatest common factor.

example: Simplify the fraction $\frac{18}{27}$

The greatest common factor of 18 and 27 is 9.

Divide the numerator and the denominator by 9.

$$\frac{18}{27} \quad \frac{\div}{\div} \quad \frac{9}{9} = \frac{2}{3}$$



Simplify each fraction.

a.
$$\frac{4}{20}$$
 =

b.
$$\frac{5}{10}$$
 =

c.
$$\frac{14}{21}$$
 =

d.
$$\frac{9}{15}$$
 =

e.
$$\frac{16}{24}$$
 =

f.
$$\frac{18}{48}$$
 =

g.
$$\frac{16}{44}$$
 =

h.
$$\frac{9}{21}$$
 =

i.
$$\frac{25}{30} =$$

j.
$$\frac{8}{22}$$
 =

k.
$$\frac{12}{30}$$
 =

I.
$$\frac{5}{20}$$
 =

There are 36 students in Frank's class. 27 of them are m. buying lunch today. Write and simplify the fraction of students that are buying lunch.

ANSWER KEY

Simplifying Fractions

To simplify a fraction, divide the numerator and the denominator by the greatest common factor.



The greatest common factor of 18 and 27 is 9.

Divide the numerator and the denominator by 9.

$$\frac{18}{27} \quad \frac{\div}{\div} \quad \frac{9}{9} = \frac{2}{3}$$



a.
$$\frac{4}{20} = \frac{1}{5}$$

b.
$$\frac{5}{10} = \frac{1}{2}$$

a.
$$\frac{4}{20} = \frac{1}{5}$$
 b. $\frac{5}{10} = \frac{1}{2}$ c. $\frac{14}{21} = \frac{2}{3}$ d. $\frac{9}{15} = \frac{3}{5}$

d.
$$\frac{9}{15} = \frac{3}{5}$$

e.
$$\frac{16}{24} = \frac{2}{3}$$

f.
$$\frac{18}{48} = \frac{3}{8}$$

e.
$$\frac{16}{24} = \frac{2}{3}$$
 f. $\frac{18}{48} = \frac{3}{8}$ g. $\frac{16}{44} = \frac{4}{11}$ h. $\frac{9}{21} = \frac{3}{7}$

h.
$$\frac{9}{21} = \frac{3}{7}$$

i.
$$\frac{25}{30} = \frac{5}{6}$$

j.
$$\frac{8}{22} = \frac{4}{11}$$

k.
$$\frac{12}{30} = \frac{2}{5}$$

i.
$$\frac{25}{30} = \frac{5}{6}$$
 j. $\frac{8}{22} = \frac{4}{11}$ k. $\frac{12}{30} = \frac{2}{5}$ l. $\frac{5}{20} = \frac{1}{4}$

$$\frac{27}{36} = \frac{3}{4}$$