Simplifying fractions

Maths

Mr Chan

Simplifying fractions

1. Shade each diagram with the fractions shown.

a) $\frac{12}{16}$

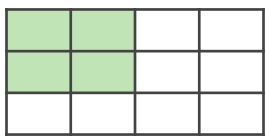
b) $\frac{6}{8}$

c) $\frac{3}{4}$

Explain why all the rectangles have the same fraction shaded in.

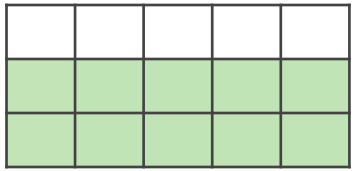
2. Write in its simplest form, the fraction of each shape that is shaded.

a)



b)

c)



Simplifying fractions

3. Simplify fully

a) $\frac{4}{8} = \frac{}{2}$

b) $\frac{3}{6} = \frac{}{2}$

c) $\frac{5}{15} = \frac{}{3}$

d) $\frac{12}{18} = \frac{}{}$

e) $\frac{18}{24} = \frac{}{}$

f) $\frac{45}{135} = \frac{}{}$

4. James and Katie have simplified the fraction $\frac{16}{40}$ in different ways.

James $\frac{16}{40} = \frac{8}{20} = \frac{4}{10} = \frac{2}{5}$

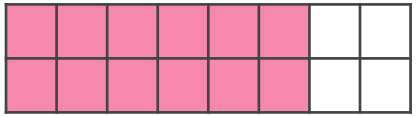
Katie $\frac{16}{40} = \frac{2}{5}$

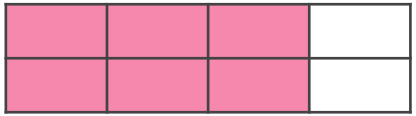
Explain how James and Katie simplified their fractions.

Answers

Simplifying fractions

1. Shade each diagram with the fractions shown.

a)  $\frac{12}{16}$

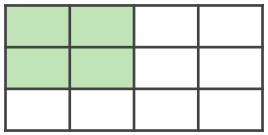
b)  $\frac{6}{8}$

c) $\frac{3}{4}$

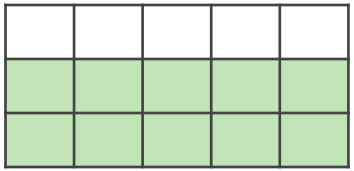
The fractions are equivalent.

Explain why all the rectangles have the same fraction shaded in.

2. Write in its simplest form, the fraction of each shape that is shaded.

a)  $\frac{1}{3}$

b) $\frac{1}{4}$

c)  $\frac{2}{3}$

Simplifying fractions

3. Simplify fully

a) $\frac{4}{8} = \frac{1}{2}$

b) $\frac{3}{6} = \frac{1}{2}$

c) $\frac{5}{15} = \frac{1}{3}$

d) $\frac{12}{18} = \frac{2}{3}$

e) $\frac{18}{24} = \frac{3}{4}$

f) $\frac{45}{135} = \frac{1}{3}$

4. James and Katie have simplified the fraction $\frac{16}{40}$ in different ways.

James $\frac{16}{40} = \frac{8}{20} = \frac{4}{10} = \frac{2}{5}$

Katie $\frac{16}{40} = \frac{2}{5}$

Explain how James and Katie simplified their fractions.

James has divided numerator and denominator by 2 each time.
Katie has divided the numerator and denominator by 8.