7 **a)** Which fraction can be simplified to $\frac{5}{8}$ and has a denominator of 40?

$\frac{\square}{\square}$

b) Which fraction can be simplified to $\frac{5}{8}$ and has a numerator of 40?

$\frac{\square}{\square}$

8 Calculate the missing values, simplifying if necessary.

CHALLENGE

a) $\frac{2+\square}{3+12} = \frac{2}{3}$

b) $\frac{2+8}{3+\square} = \frac{2}{5}$

c) $\frac{2+14}{3+17} = \frac{\square}{\square}$

d) $\frac{5+\square}{3+\square} = \frac{3}{4}$

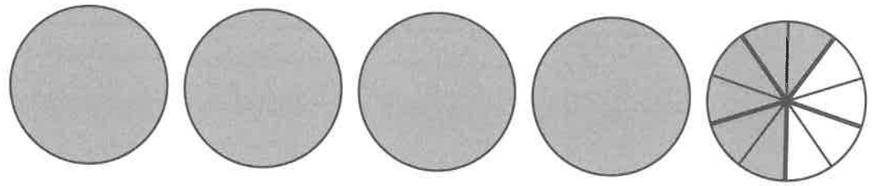
Reflect

Explain how to simplify the fraction $\frac{12}{18}$.

→ Textbook 6A p128

Simplifying fractions 2

1 Simplify $4\frac{6}{10}$.



$\frac{6}{10} = \frac{\square}{\square}$ So $4\frac{6}{10} = 4\frac{\square}{\square}$

2 Simplify fully these fractions.

a) $\frac{16}{40} = \frac{\square}{\square}$

b) $\frac{24}{40} = \frac{\square}{\square}$

$1\frac{16}{40} = \square\frac{\square}{\square}$

$\frac{48}{80} = \frac{\square}{\square}$

$2\frac{16}{40} = \square\frac{\square}{\square}$

$\frac{240}{400} = \frac{\square}{\square}$

$32\frac{16}{40} = \square\frac{\square}{\square}$

$\frac{40}{24} = \frac{\square}{\square} = \square\frac{\square}{\square}$

What patterns did you notice?

In part a) I noticed _____.

In part b) I noticed _____.

3 Emma is trying to fully simplify some fractions.

Explain what mistake she has made in each question.

a) $\frac{6}{12} = \frac{3}{6}$

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

c) $8\frac{4}{10} = 4\frac{2}{5}$

4 Simplify each of the following fractions.

Write your answer as a mixed number where possible.

a) $6\frac{8}{12} =$

b) $\frac{30}{72} =$

c) $15\frac{24}{48} =$

d) $\frac{84}{132} =$

e) $\frac{40}{16} =$

f) $\frac{90}{72} =$

5 Which fraction is **not** equivalent to the other fractions?

	$2\frac{12}{15}$	$\frac{28}{10}$	$\frac{42}{30}$

3 Emma is trying to fully simplify some fractions.

Explain what mistake she has made in each question.

a) $\frac{6}{12} = \frac{3}{6}$

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

c) $8\frac{4}{10} = 4\frac{2}{5}$

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e) $\frac{40}{16} =$

f) $\frac{90}{72} =$

5 Which fraction is **not** equivalent to the other fractions?

$2\frac{12}{15}$ $\frac{28}{10}$ $\frac{42}{30}$

6 Which fraction does not simplify to a whole number?

$\frac{36}{6}$ $\frac{20}{40}$ $\frac{72}{36}$ $\frac{144}{36}$

7 Simplify these fractions.

CHALLENGE

a) $\frac{268}{64}$

b) $\frac{3352}{384}$

Remember to keep dividing the numerator and the denominator by the same number until you cannot simplify any more.



Reflect

Explain how to simplify $4\frac{16}{24}$.