

Equivalent fraction families



1 Shade the bar models to represent the equivalent fractions.

a)

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

b)

$\frac{1}{2}$	$\frac{1}{2}$
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$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$
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 $\frac{1}{2} = \frac{2}{4}$

c)

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

d)

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

2 Shade the diagrams to help you complete the equivalent fractions.

The first one has been done for you.

a)

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

b)

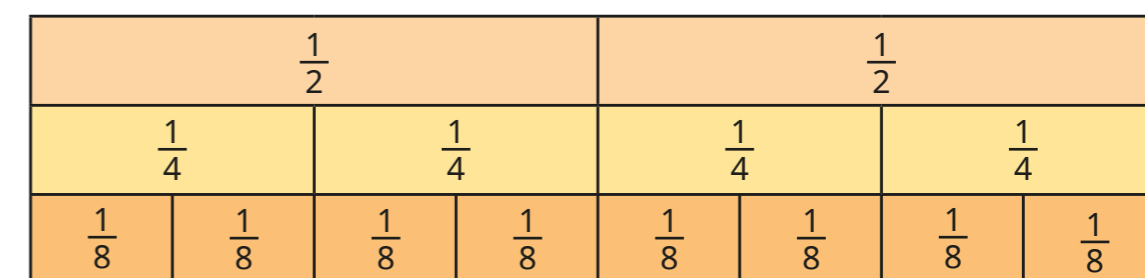
 $\frac{1}{2} = \frac{\boxed{}}{\boxed{}}$

c)

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 $\frac{1}{4} = \frac{\boxed{}}{\boxed{}}$

3 Use the fraction wall to complete the equivalent fractions.



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

c) $\frac{2}{4} = \frac{4}{\boxed{}}$

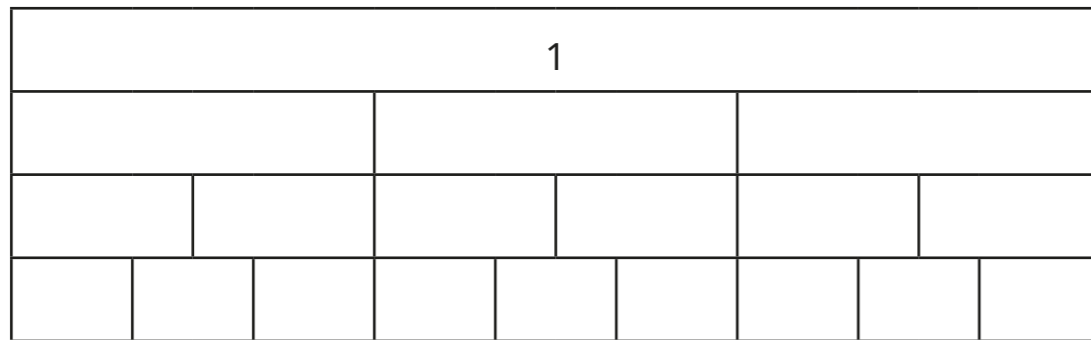
e) $\frac{\boxed{}}{8} = \frac{3}{4}$

b) $\frac{1}{2} = \frac{\boxed{}}{8}$

d) $\frac{2}{8} = \frac{\boxed{}}{4}$

f) $\frac{2}{2} = \frac{\boxed{}}{4} = \frac{\boxed{}}{8}$

- 4 a) Label the fractions on the fraction wall.



- b) Use the fraction wall to complete the equivalent fractions.

$$\frac{1}{3} = \frac{\square}{6} = \frac{3}{\square}$$

$$\frac{\square}{3} = \frac{4}{\square} = \frac{6}{9}$$

$$\frac{3}{\square} = \frac{6}{\square} = \frac{9}{\square} = 1$$

- 5 a) Write the fractions in the correct place on the sorting diagram.

$\frac{8}{24}$	$\frac{3}{12}$	$\frac{5}{15}$	$\frac{6}{24}$	$\frac{4}{12}$	$\frac{9}{36}$	$\frac{3}{9}$	$\frac{4}{16}$
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	equivalent to $\frac{1}{3}$	equivalent to $\frac{1}{4}$
odd denominator		
even denominator		

- b) Why are parts of the table empty?

- 6 Are the statements always, sometimes or never true?

Circle your answer.

Draw a diagram to support your answer.

- a) Fractions equivalent to one half have even numerators.

always

sometimes

never

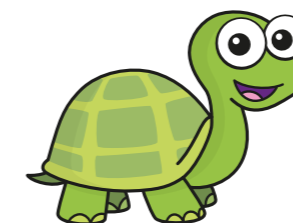
- b) If a fraction is equivalent to one half, the denominator will be double the numerator.

always

sometimes

never

- 7



To find all the fractions equivalent to a given fraction, you just keep doubling the numerators and denominators.

Do you agree with Tiny? _____

Talk about it with a partner.

