Maths Planning and Ideas

Week Commencing: Monday 22. 02. 2021

Year Group: Year 4

	Monday	Tuesday	Wednesday	Thursday	Friday
Area of Learning	LC: Can you find equivalent fractions?	LC: Can you find equivalent fractions?	LC: Can you find equivalent fractions?	LC: Can you recognise fractionsgreaterthan1?	LC: Can you count using fractions?
Activity	**Starter:** Times Table Rockstars **Main:** Go to the following website: https://whiterosemaths.com/ Find and watch **Equivalent fractions (2)** video. Pause if you need to take notes or replay sections to help with understanding. **Independent Task:** Children to complete worksheet found in resources.	**Starter:** Times Table Rockstars **Main:** Go to the following website: https://whiterosemaths.com/ Find and watch **Equivalent fractions (1)** video. Pause if you need to take notes or replay sections to help with understanding. **Independent Task:** Children to complete worksheet found in resources.	**Starter:** Times Table Rockstars **Main:** Go to the following websit https://whiterosemaths.com// Find and watch **Equivalent fractions (2)**video. Pause if you need to take notes or replay sections to help with understanding. **Independent Task:** Children to complete worksheet found in resources.	**Starter:** Times Table Rockstars **Main:** Go to the following website: https://whiterosemaths.com/ Find and watch **Fractions greater than 1** video. Pause if you need to take notes or replay sections to help with understanding. **Independent Task:** Children to complete worksheet found in resources.	**Starter:** Times Table Rockstars **Main:** Go to the following website: https://whiterosemaths.com/ Find and watch **Count in fractions** video. Pause if you need to take notes or replay sections to help with understanding. **Independent Task:** Children to complete worksheet found in resources.

	Answers can be found in resources.	Answers can be found in resources.	Answers can be found in resources.	Answers can be found in resources.	Answers can be found in resources.

Where can I complete further work?

Twinkl – Subscription service used by schools is offering a free premium service for teachers, parents and children to use whilst schools are closed. Enter the code **UKTWINKLHELPS** for access to worksheets, powerpoints and interactive games to support all areas of learning.

Classroom Secrets – Free Maths, Reading and Grammar home learning packs and interactive resources for all ages.

White Rose Maths – Free Maths home learning resources for all ages. Watch the videos and try the questions.

Primary Stars – Free Maths home learning packs for Year 1 and 2.

BBC Bitesize Primary – Free learning resources available for KS1 and KS2 across all subjects.

I See Maths – Free daily home maths lessons hosted by Gareth Metcalfe. Follow the link for videos, information and resources.

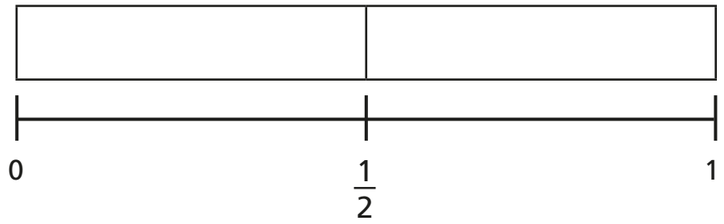
Top Marks – Free educational resources and games for English and Maths.

ICT Games – Free educational resources and games for English and Maths.

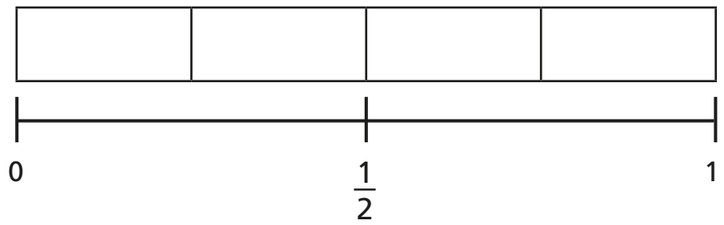
Equivalent fractions (2)

1 Shade the bar models to represent the fractions.

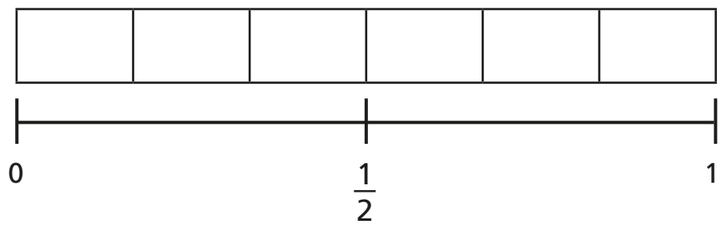
a) Shade $\frac{1}{2}$ of the bar model.



b) Shade $\frac{2}{4}$ of the bar model.



c) Shade $\frac{3}{6}$ of the bar model.

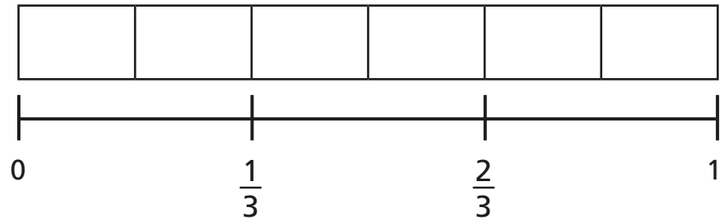


d) What do you notice?

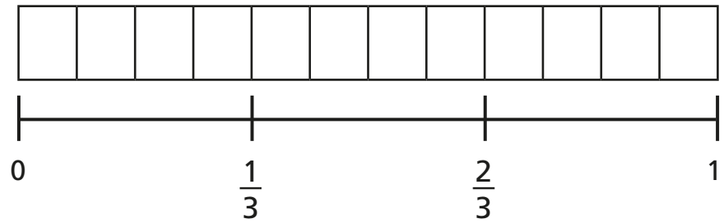
e) Write another fraction that is equivalent to $\frac{1}{2}$

2 Shade $\frac{2}{3}$ of each bar model.

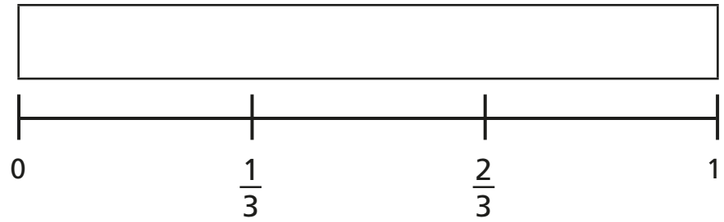
a)



b)



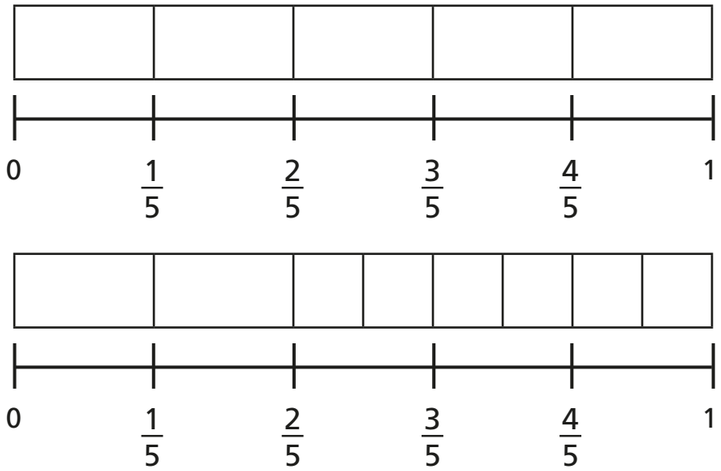
c)

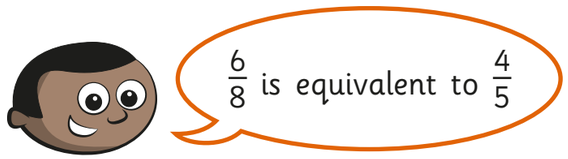


d) Use your answers to parts a), b) and c) to complete the equivalent fractions.

$$\frac{2}{3} = \frac{\square}{6} = \frac{8}{\square} = \frac{\square}{15}$$

3 Mo is finding equivalent fractions.



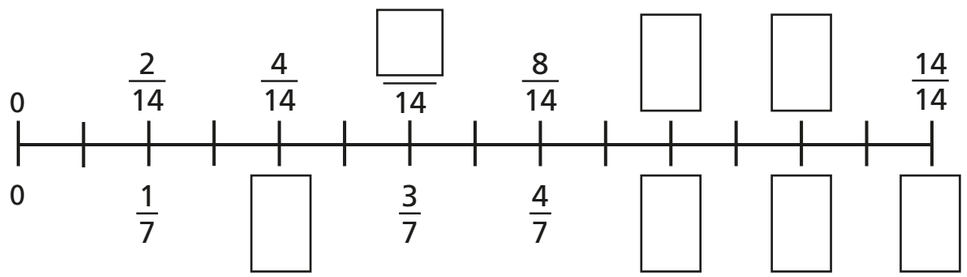


Do you agree with Mo? _____

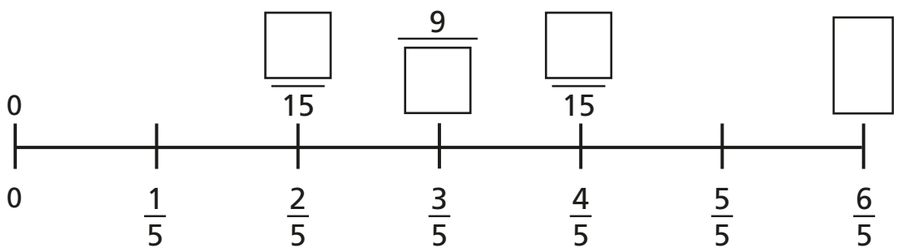
Explain your answer.

4 Find the missing numbers.

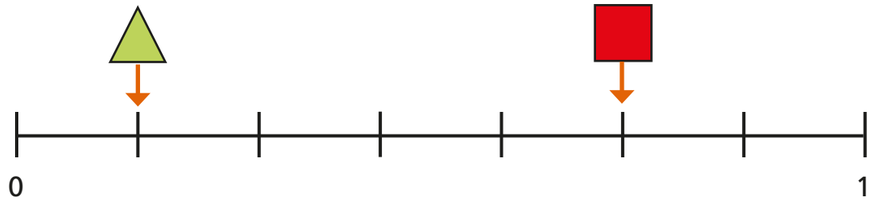
a)



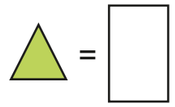
b)

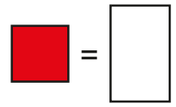


5 Here is a number line.



a) What fraction is each shape pointing to?

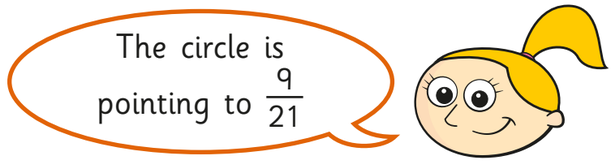




b) A circle is halfway between the triangle and the square.

Draw the circle on the number line.

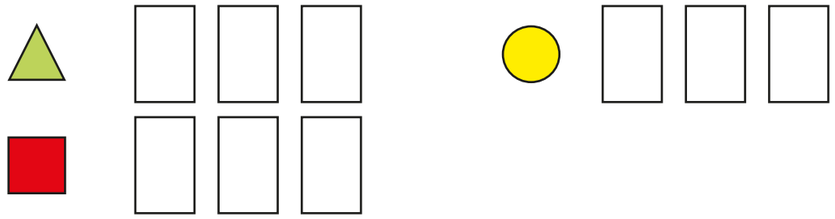
c)



Do you agree with Eva? _____

Show how you worked this out.

d) Write three equivalent fractions for each shape.



Compare answers with a partner.

Equivalent fractions (1)

1 Shade the bar models to represent the equivalent fractions.

a)

$\frac{1}{2}$	$\frac{1}{2}$

$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$

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

b)

$\frac{1}{2}$	$\frac{1}{2}$

$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$

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

c)

$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$

$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$

$\frac{4}{5} = \frac{8}{10}$

d)

$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$

$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$

$\frac{6}{8} = \frac{3}{4}$

2 Use the fraction wall to complete the equivalent fractions.

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

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

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

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

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

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

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

3 **a)** Label the fractions on the fraction wall.

1		

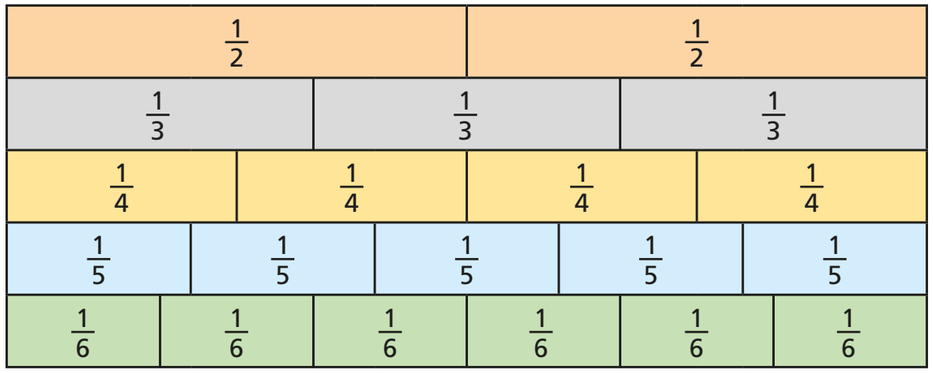
b) Use the fraction wall to complete the equivalent fractions.

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

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

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

4 Here is a fraction wall.



Is each statement true or false? Tick your answers.

	True	False
a) $\frac{1}{2}$ is equivalent to $\frac{3}{6}$	☐	☐
b) $\frac{2}{3}$ is equivalent to $\frac{3}{4}$	☐	☐
c) $\frac{2}{4}$ is equivalent to $\frac{3}{6}$	☐	☐
d) $\frac{2}{3}$ is equivalent to $\frac{4}{5}$	☐	☐
e) $\frac{2}{3}$ is equivalent to $\frac{4}{6}$	☐	☐
f) $\frac{3}{5}$ is equivalent to $\frac{4}{6}$	☐	☐

Write your own equivalent fractions statements.

Ask a partner to say if they are true or false.

5 Are the statements always, sometimes or never true?

Circle your answer.

Draw a diagram to support your answer.

a) The greater the numerator, the greater the fraction.

always **sometimes** **never**

b) Fractions equivalent to one half have even numerators.

always **sometimes** **never**

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

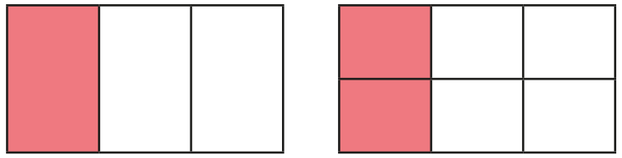
always **sometimes** **never**

Equivalent fractions (2)

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

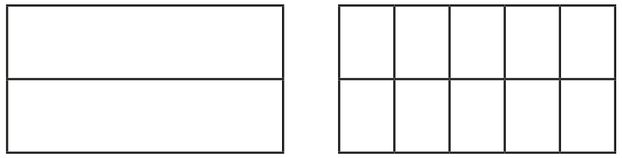
The first one has been done for you.

a)



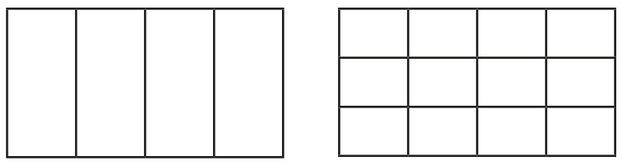
$\frac{1}{3} = \frac{2}{6}$

b)



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

c)



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

2 Draw a diagram to show that $\frac{3}{4} = \frac{6}{8}$

3 Match the equivalent fractions.

$\frac{1}{4}$	$\frac{3}{21}$
$\frac{4}{10}$	$\frac{2}{3}$
$\frac{10}{15}$	$\frac{2}{5}$
$\frac{1}{7}$	$\frac{3}{12}$

4 Complete the equivalent fractions.

a) $\frac{1}{5} = \frac{\square}{10}$

b) $\frac{4}{5} = \frac{\square}{10}$

c) $\frac{3}{10} = \frac{6}{\square}$

d) $\frac{3}{10} = \frac{9}{\square}$

e) $\frac{6}{8} = \frac{3}{\square}$

f) $\frac{8}{12} = \frac{\square}{3}$

g) $\frac{8}{12} = \frac{2}{\square}$

h) $\frac{2}{\square} = \frac{10}{25}$

i) $\frac{1}{\square} = \frac{4}{28}$

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

$\frac{8}{24}$ $\frac{3}{12}$ $\frac{5}{15}$ $\frac{6}{24}$ $\frac{4}{12}$ $\frac{9}{36}$ $\frac{3}{9}$ $\frac{4}{16}$

	equivalent to $\frac{1}{3}$	equivalent to $\frac{1}{4}$
odd denominator		
even denominator		

b) Are any of the boxes empty?

Why do you think this is?

Talk about your answer with a partner.

6 Find three ways to make the fractions equivalent.

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

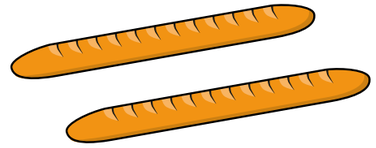
b) $\frac{1}{\square} = \frac{4}{\square}$ $\frac{1}{\square} = \frac{4}{\square}$ $\frac{1}{\square} = \frac{4}{\square}$

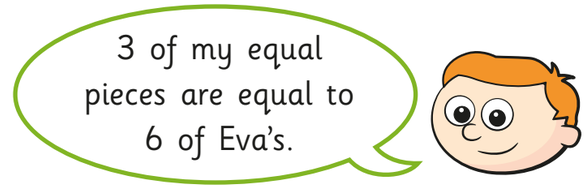
c) $\frac{\square}{3} = \frac{\square}{9}$ $\frac{\square}{3} = \frac{\square}{9}$ $\frac{\square}{3} = \frac{\square}{9}$

7 Eva and Ron have a baguette each.

The baguettes are the same size.

Eva cuts her baguette into 8 equal pieces.





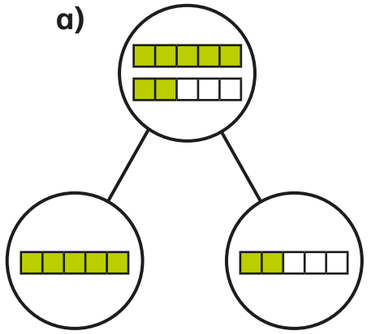
How many equal pieces has Ron cut his baguette into?

Ron has cut his baguette into $\square$ equal pieces.

Fractions greater than 1

1 Complete the sentences.

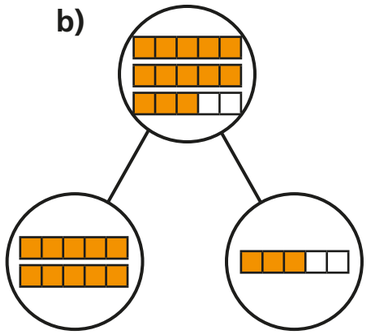
a)



There are 7 fifths altogether.

7 fifths = ☐ whole + ☐ fifths

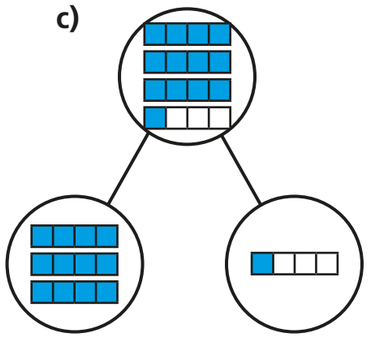
b)



There are ☐ fifths altogether.

☐ fifths = ☐ wholes + ☐ fifths

c)



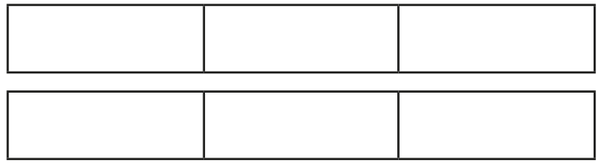
There are ☐ quarters altogether.

☐ quarters = ☐ wholes + ☐ quarter

2 Shade the bar models to represent the fractions.

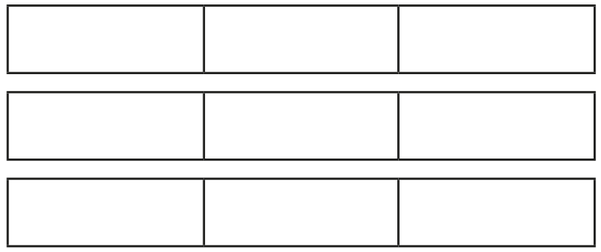
Complete the number sentences.

a) $\frac{5}{3}$



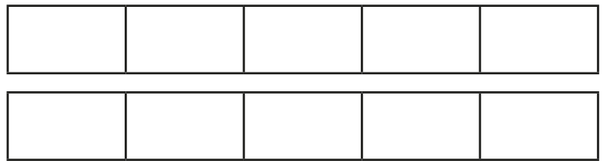
$\frac{5}{3}$ = ☐ whole + ☐ thirds = ☐

b) $\frac{8}{3}$



$\frac{8}{3}$ = ☐ wholes + ☐ thirds = ☐

c) $\frac{8}{5}$



$\frac{8}{5}$ = ☐ whole + ☐ fifths = ☐

3 Complete the statements.

a) $\frac{12}{2}$ = ☐ wholes

b) $\frac{12}{4}$ = ☐ wholes

c) $\frac{12}{6}$ = ☐ wholes

d) $\frac{12}{3}$ = ☐ wholes

e) $\frac{15}{3}$ = ☐ wholes

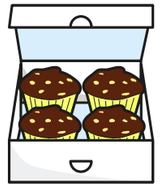
f) $\frac{15}{5}$ = ☐ wholes

g) $\frac{15}{4}$ = ☐ wholes + ☐ quarters

h) $\frac{15}{2}$ = ☐ wholes + ☐ half

4 Whitney bakes 26 muffins.

Muffins are packed in boxes of 4



a) How many boxes can Whitney fill?

Whitney can fill ☐ boxes.

b) How many more muffins does Whitney need to fill another box?

Whitney needs ☐ muffins to fill another box.

Explain how you know.

How does writing $\frac{26}{4}$ help you to answer this?

5 Write <, > or = to complete the statements.

a) 2 wholes and 3 quarters ◯ 5 quarters

b) 2 wholes and 3 quarters ◯ 15 quarters

c) 2 wholes and 3 sixths ◯ 15 sixths

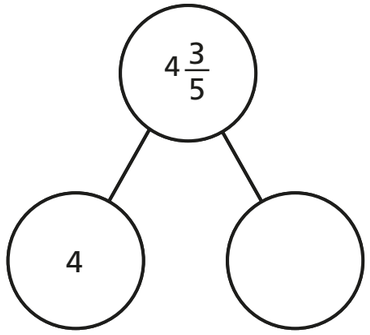
d) 2 wholes and 3 eighths ◯ 15 eighths

e) $\frac{15}{3}$ ◯ $\frac{15}{5}$

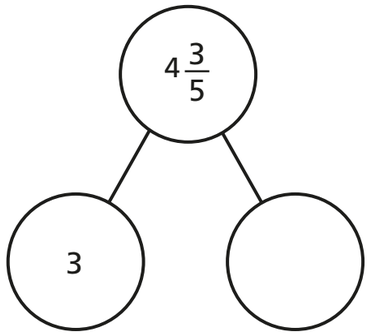
f) $\frac{15}{3}$ ◯ $\frac{20}{4}$

6 Complete the part-whole models.

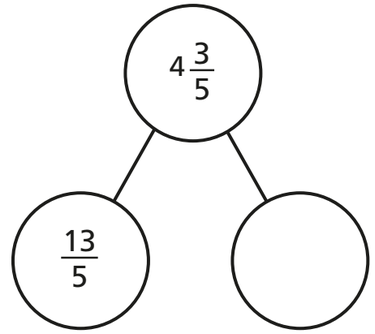
a)



b)



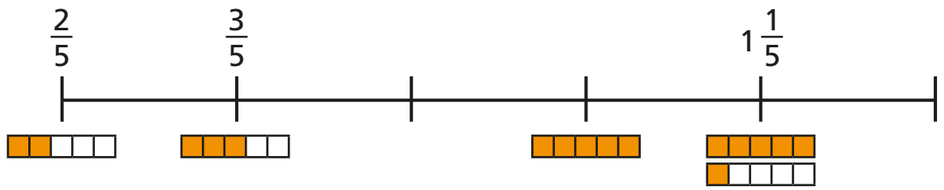
c)



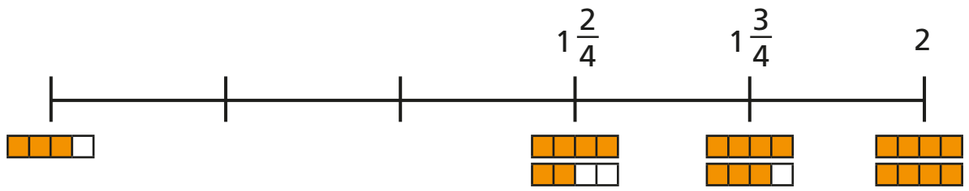
Count in fractions

1 Complete the number lines.

a)

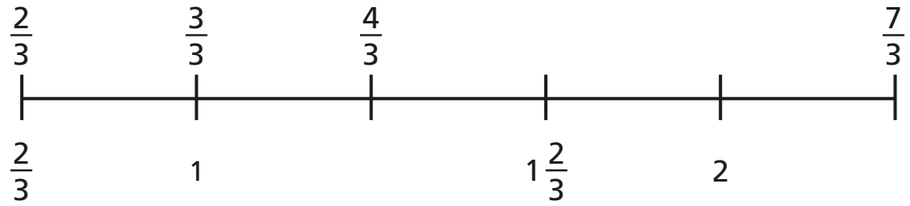


b)



2 Complete the number lines.

a)



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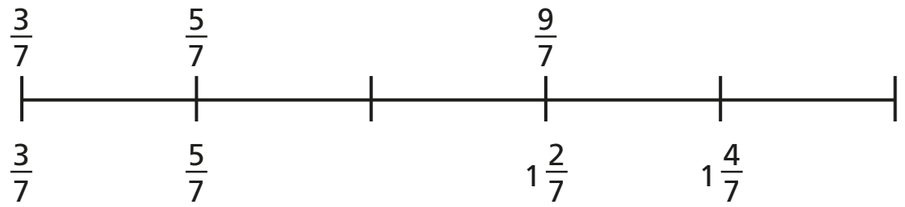

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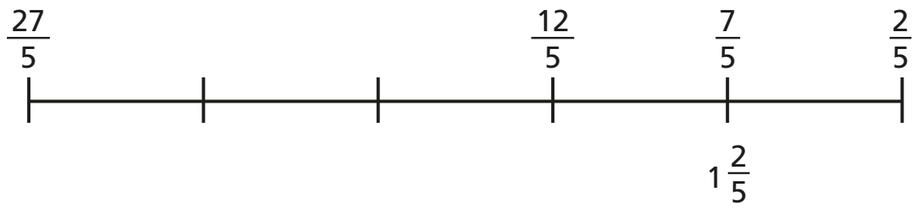


3 Write the next three fractions in each sequence.

a) $\frac{1}{8}$, $\frac{2}{8}$, $\frac{3}{8}$, ☐, ☐, ☐

b) $\frac{1}{4}$, $\frac{2}{4}$, $\frac{3}{4}$, ☐, ☐, ☐

c) $\frac{1}{4}$, $\frac{3}{4}$, $1\frac{1}{4}$, ☐, ☐, ☐

d) 4, $3\frac{1}{3}$, $2\frac{2}{3}$, ☐, ☐, ☐

4 What is the missing fraction?

Give two possible answers.

a) $\frac{8}{3}$, $\frac{12}{3}$, $\frac{16}{3}$, $\frac{20}{3}$, ☐, $\frac{28}{3}$, $\frac{32}{3}$

☐ ☐

b) $\frac{8}{5}$, $\frac{12}{5}$, $\frac{16}{5}$, $\frac{20}{5}$, ☐, $\frac{28}{5}$, $\frac{32}{5}$

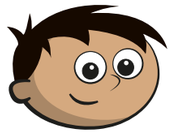
☐ ☐

c) $\frac{8}{7}$, $\frac{12}{7}$, $\frac{16}{7}$, $\frac{20}{7}$, ☐, $\frac{28}{7}$, $\frac{32}{7}$

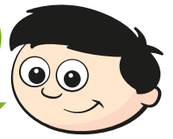
☐ ☐

5 Amir, Dexter and Dora are counting in fractions.

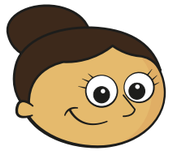
$\frac{8}{10}$, $\frac{9}{10}$, $\frac{10}{10}$, $\frac{11}{10}$



Amir: The next fraction is $\frac{12}{10}$



Dexter: The next fraction is $1\frac{2}{10}$



Dora: The next fraction is $1\frac{1}{5}$

a) Who is correct? _____

Explain your answer.

_____

_____

_____

b) Compare answers with a partner.