



1) a)  $\frac{7}{4} > \frac{10}{8}$

b)  $\frac{8}{6} < \frac{5}{3}$



2) a)  $1\frac{3}{4} > 1\frac{1}{2}$



b)  $1\frac{1}{4} < 1\frac{3}{8}$



3) a)

	$\frac{6}{3}$	$\frac{7}{6}$	$\frac{8}{12}$
Find the equivalent fractions:	$\frac{24}{12}$	$\frac{14}{12}$	$\frac{8}{12}$
Order the fractions:	$\frac{8}{12}$	$\frac{7}{6}$	$\frac{6}{3}$

b)

	$1\frac{3}{4}$	$1\frac{1}{8}$	$\frac{19}{16}$
Find the equivalent fractions:	$\frac{28}{16}$	$\frac{18}{16}$	$\frac{19}{16}$
Order the fractions:	$1\frac{1}{8}$	$\frac{19}{16}$	$1\frac{3}{4}$



1) a) Lucas has drawn the bar models which show  $\frac{3}{4}$  and  $\frac{5}{8}$  different sizes – the whole bar needs to be the same size. Also, he has only drawn one square to represent one whole.

b) Children may suggest that Lucas needs to improve his understanding of what a whole is and how it is used in a mixed number.

2) a)  $\frac{1}{4}$     $\frac{10}{4}$     $\frac{10}{8}$     $3\frac{3}{4}$    3

b)  $\frac{1}{4}$     $\frac{10}{8}$     $\frac{10}{4}$    3    $3\frac{3}{4}$

3) Kwamena is correct.

Riley is wrong. Although one whole is larger than a fraction of a whole, an improper fraction is larger than one whole.

Sally is wrong. Although 8 is the larger numerator, we need to look at the denominators as well as the whole in the mixed number to tell which is the larger number or fraction.

1) a)  $\frac{13}{12} < \frac{7}{6}$

b)  $1\frac{3}{4} < \frac{16}{8}$

c)  $\frac{26}{16} = 1\frac{5}{8}$



2) Will

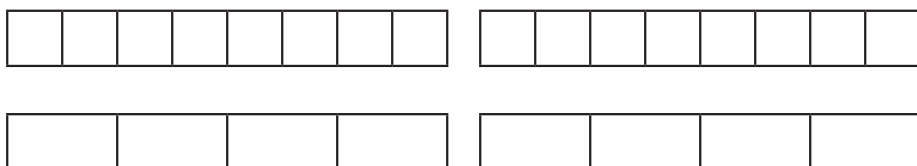
Lucy

Will ate the most cake overall.

3) Accept any problems that compare fractions greater than 1.

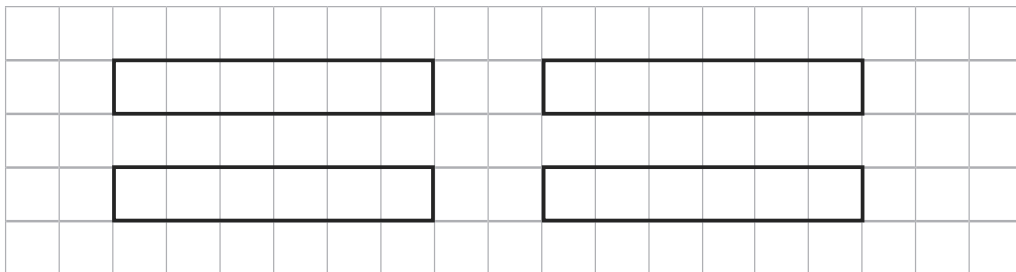


1) a) Use these bar models to compare  $\frac{10}{8}$  and  $\frac{7}{4}$ .



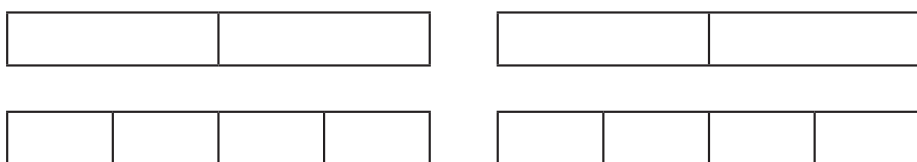
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b) Draw two bar models to compare  $\frac{5}{3}$  and  $\frac{8}{6}$ .



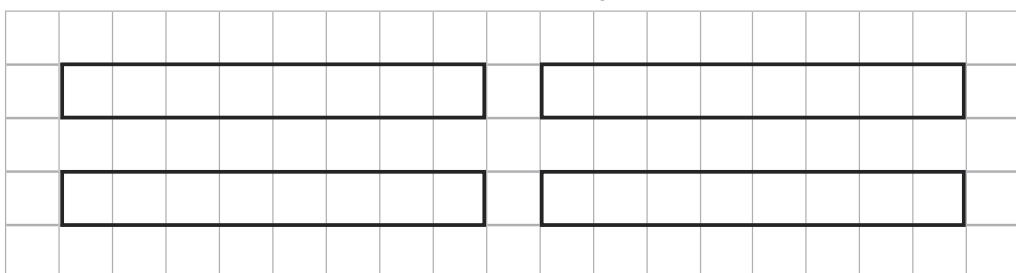
<

2) a) Colour these bar models to compare  $1\frac{1}{2}$  and  $1\frac{3}{4}$ .



>

b) Draw two bar models to compare  $1\frac{1}{4}$  and  $1\frac{3}{8}$ .



<

3) Use your knowledge of common denominators to order these fractions from smallest to greatest.

a)

	$\frac{6}{3}$	$\frac{7}{6}$	$\frac{8}{12}$
Find the equivalent fractions:	<input type="text"/> $\frac{\quad}{12}$	<input type="text"/> $\frac{\quad}{12}$	<input type="text"/> $\frac{\quad}{12}$
Order the fractions:	<input type="text"/>	<input type="text"/>	<input type="text"/>

b)

	$1\frac{3}{4}$	$1\frac{1}{8}$	$1\frac{19}{16}$
Find the equivalent fractions:	<input type="text"/> $\frac{\quad}{\quad}$	<input type="text"/> $\frac{\quad}{\quad}$	<input type="text"/> $\frac{\quad}{\quad}$
Order the fractions:	<input type="text"/>	<input type="text"/>	<input type="text"/>



1) Lucas has drawn two bar models to compare  $1\frac{3}{4}$  and  $1\frac{5}{8}$ .



a) Explain the mistakes that Lucas has made.

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b) What advice would you give Lucas to improve his understanding of fractions?

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2) Phoebe has ordered these improper fractions and mixed numbers from smallest to greatest.

a) Circle her mistakes.

$\frac{1}{4}$     $\frac{10}{4}$     $\frac{10}{8}$     $3\frac{3}{4}$    3

b) Write them in the correct order.

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3)  $1\frac{4}{5} > \frac{8}{5}$




Riley

This is correct because one whole is larger than a fraction.



Kwamena

This is wrong because one whole and four fifths are equal to nine fifths.



Sally

This is wrong because 8 is the larger numerator.

Who is right and who is wrong? Explain the mistakes that some of the children have made.

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1) Fill in the missing numbers.

a)  $\frac{\square}{12} < \frac{7}{6}$  (Your fraction should be greater than 1.)

b)  $\square \frac{3}{4} < \frac{16}{8}$

c)  $\frac{26}{16} = 1 \frac{5}{\square}$

Your fraction should be

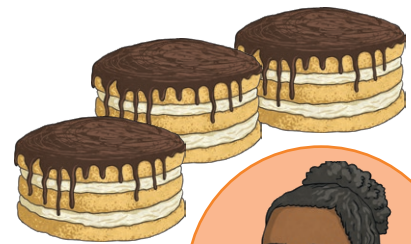
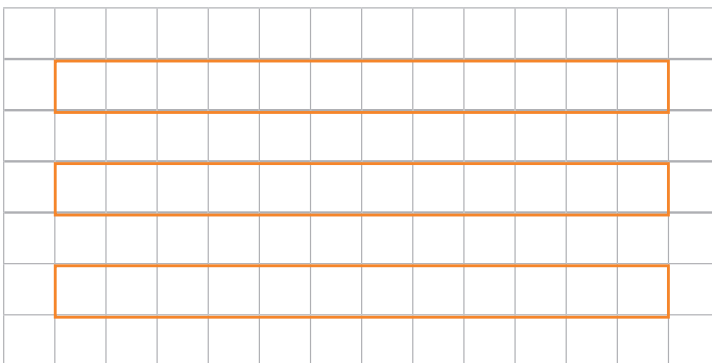
I cut each of my cakes into 4 equal pieces. I have eaten 11 pieces of cake overall.



Will



2) Who ate more cake overall?



Lucy

I cut each of my cakes into 6 equal pieces. I have eaten 15 pieces of cake overall.

Who ate the most cake overall? Complete the bar models to solve the problem. \_\_\_\_\_

3) Write a problem that involves comparing fractions that are greater than 1. Can your partner solve it?

\_\_\_\_\_

Diving into Mastery



# Compare and Order Fractions Greater Than 1



# Diving into Mastery Guidance for Educators

Each activity sheet is split into three sections, diving, deeper and deepest, which are represented by the following icons:



**Diving**



**Deeper**



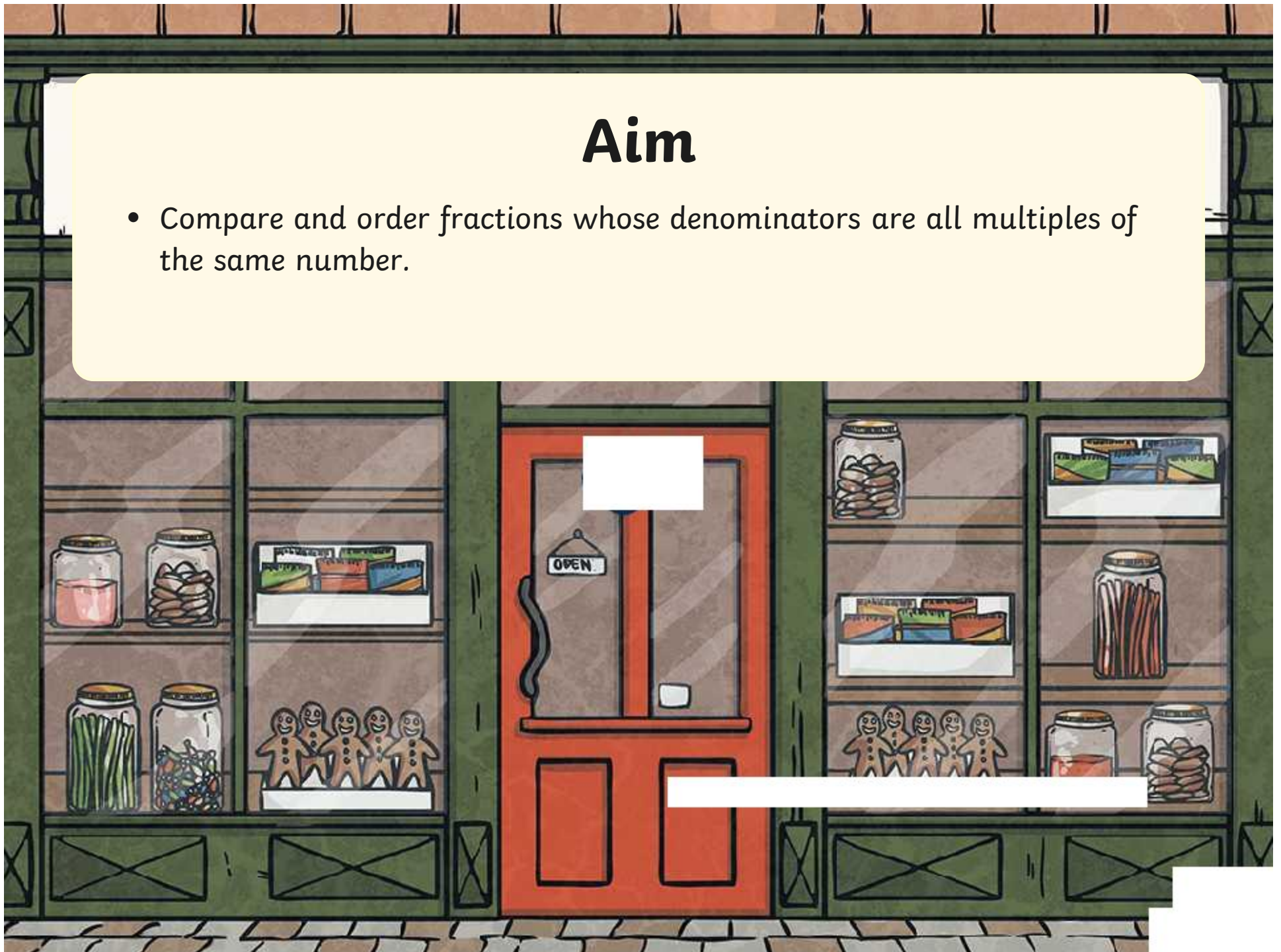
**Deepest**

These carefully designed activities take your children through a learning journey, initially ensuring they are fluent with the key concept being taught; then applying this to a range of reasoning and problem-solving activities.

These sheets might not necessarily be used in a linear way. Some children might begin at the 'Deeper' section and in fact, others may 'dive straight in' to the 'Deepest' section if they have already mastered the skill and are applying this to show their depth of understanding.

# Aim

- Compare and order fractions whose denominators are all multiples of the same number.



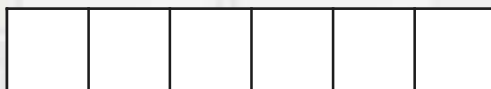


## Compare and Order Fractions Greater Than 1

## Diving



Use these bar models to compare  $\frac{11}{6}$  and  $\frac{5}{3}$ .



$$\frac{5}{3}$$

<

$$\frac{11}{6}$$



Draw bar models to compare  $\frac{6}{4}$  and  $\frac{14}{8}$ .



$$\frac{14}{8}$$

>

$$\frac{6}{4}$$

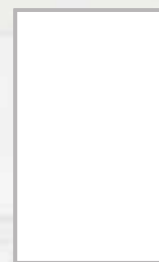
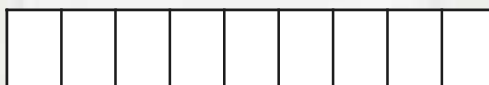
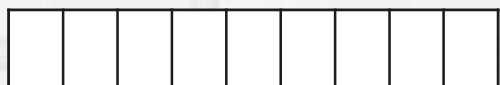


## Compare and Order Fractions Greater Than 1

## Diving



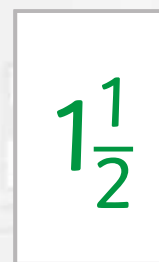
Use these bar models to compare  $1\frac{2}{3}$  and  $1\frac{5}{9}$ .



>



Draw bar models to compare  $1\frac{5}{8}$  and  $1\frac{1}{2}$ .



<



## Compare and Order Fractions Greater Than 1

## Diving



Use your knowledge of common denominators to order these fractions from smallest to greatest.

Diagram illustrating the conversion of fractions to a common denominator of 16:

- $\frac{7}{4}$  is multiplied by 4 to get  $\frac{\square}{16}$ . (Green box:  $\times 4$ )
- $\frac{10}{16}$  remains  $\frac{\square}{16}$ .
- $\frac{13}{8}$  is multiplied by 2 to get  $\frac{\square}{16}$ . (Pink box:  $\times 2$ )

Ordering the fractions from smallest to greatest:

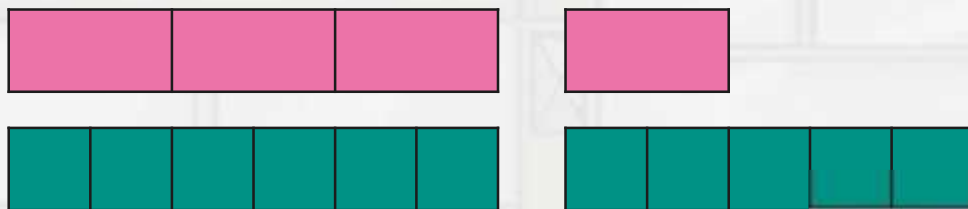
$$\frac{10}{16} \quad \frac{13}{8} \quad \frac{7}{4}$$

## Compare and Order Fractions Greater Than 1

Deeper



Archie has drawn two bar models to compare  $1\frac{1}{3}$  and  $1\frac{5}{6}$



What has Archie done wrong?

In the parts of the bar model that represent the fractions, he has not drawn the rest of the whole.

What advice would you give Archie to improve his understanding of fractions?





## Compare and Order Fractions Greater Than 1

## Deeper



Hailey has ordered these improper fractions and mixed numbers from smallest to greatest.

$$\frac{7}{5} \quad 1\frac{3}{10} \quad \frac{19}{10}$$

Spot her mistake and then write the numbers in the correct order.

$\frac{7}{5}$  is equivalent to  $\frac{14}{10}$  and  $1\frac{3}{10}$  is equivalent to  $\frac{13}{10}$ .

$$1\frac{3}{10} \quad \frac{7}{5} \quad \frac{19}{10}$$





## Compare and Order Fractions Greater Than 1

Deepest



Fill in the missing numbers.

$$1 \frac{1}{5} < \frac{13}{10}$$

$$\frac{21}{12} < 2 \frac{3}{4}$$

or  $1 \frac{3}{4}$



## Compare and Order Fractions Greater Than 1

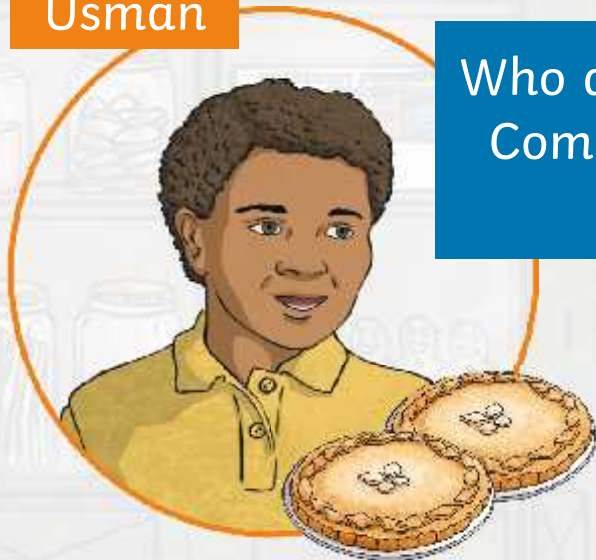
Deepest



Usman and Saira have 2 pies each.

I cut each of my pies into 3 equal pieces. I have eaten 4 pieces of pie overall.

Usman



I cut each of my pies into 6 equal pieces. I have eaten 11 pieces of pie overall

Saira



Who ate the most pie overall?  
Complete the bar models to solve the problem.

# Compare and Order Fractions Greater Than 1

# Deepest



Usman and Saira have two pies each.



I cut each of my pies into 3 equal pieces. I have eaten 4 pieces of pie overall.

Usman



Saira ate the most pie overall.



I cut each of my pies into 6 equal pieces. I have eaten 11 pieces of pie overall.

Saira



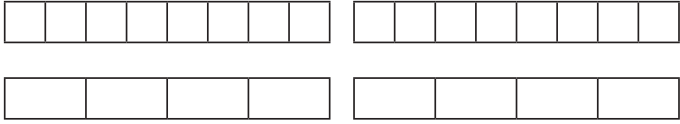






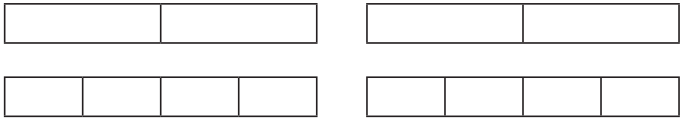


- 1) a) Use these bar models to compare  $\frac{10}{8}$  and  $\frac{7}{4}$ .



- b) Draw two bar models to compare  $\frac{5}{3}$  and  $\frac{8}{6}$ .

- 2) a) Copy and colour these bar models to compare  $1\frac{1}{2}$  and  $1\frac{3}{4}$ .



- b) Draw two bar models to compare  $1\frac{1}{4}$  and  $1\frac{3}{8}$ .

- 3) Use your knowledge of common denominators to order these fractions from smallest to greatest.

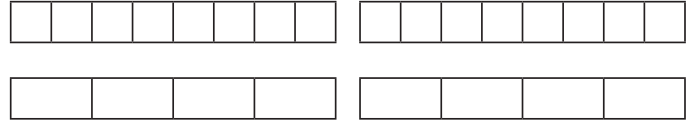
a)

	$\frac{6}{3}$	$\frac{7}{6}$	$\frac{8}{12}$
Find the equivalent fractions:	<input type="checkbox"/> $\frac{\quad}{12}$	<input type="checkbox"/> $\frac{\quad}{12}$	<input type="checkbox"/> $\frac{\quad}{12}$
Order the fractions:			

b)

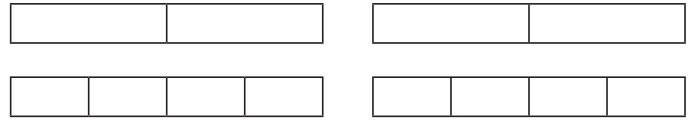
	$\frac{3}{14}$	$\frac{1}{8}$	$\frac{19}{16}$
Find the equivalent fractions:	<input type="checkbox"/> $\frac{\quad}{\quad}$	<input type="checkbox"/> $\frac{\quad}{\quad}$	<input type="checkbox"/> $\frac{\quad}{\quad}$
Order the fractions:			

- 1) a) Use these bar models to compare  $\frac{10}{8}$  and  $\frac{7}{4}$ .



- b) Draw two bar models to compare  $\frac{5}{3}$  and  $\frac{8}{6}$ .

- 2) a) Copy and colour these bar models to compare  $1\frac{1}{2}$  and  $1\frac{3}{4}$ .



- b) Draw two bar models to compare  $1\frac{1}{4}$  and  $1\frac{3}{8}$ .

- 3) Use your knowledge of common denominators to order these fractions from smallest to greatest.

a)

	$\frac{6}{3}$	$\frac{7}{6}$	$\frac{8}{12}$
Find the equivalent fractions:	<input type="checkbox"/> $\frac{\quad}{12}$	<input type="checkbox"/> $\frac{\quad}{12}$	<input type="checkbox"/> $\frac{\quad}{12}$
Order the fractions:			

b)

	$\frac{3}{14}$	$\frac{1}{8}$	$\frac{19}{16}$
Find the equivalent fractions:	<input type="checkbox"/> $\frac{\quad}{\quad}$	<input type="checkbox"/> $\frac{\quad}{\quad}$	<input type="checkbox"/> $\frac{\quad}{\quad}$
Order the fractions:			

- 1) Lucas has drawn two bar models to compare  $1\frac{3}{4}$  and  $1\frac{5}{8}$ .



- a) Explain the mistakes that Lucas has made.  
 b) What advice would you give Lucas to improve his understanding of fractions?
- 2) Phoebe has ordered these improper fractions and mixed numbers from smallest to greatest.

- a) Circle her mistakes.

$\frac{1}{4}$     $\frac{10}{4}$     $\frac{10}{8}$     $3\frac{3}{4}$    3

- b) Write them in the correct order.

3)  $1\frac{4}{5} > \frac{8}{5}$

This is correct because one whole is larger than a fraction.

Riley

This is wrong because 8 is the larger numerator.

Sally

This is wrong because one whole and four fifths is equal to nine fifths.

Kwamena

Who is right and who is wrong? Explain the mistakes that some of the children have made.

- 1) Lucas has drawn two bar models to compare  $1\frac{3}{4}$  and  $1\frac{5}{8}$ .



- a) Explain the mistakes that Lucas has made.  
 b) What advice would you give Lucas to improve his understanding of fractions?
- 2) Phoebe has ordered these improper fractions and mixed numbers from smallest to greatest.

- a) Circle her mistakes.

$\frac{1}{4}$     $\frac{10}{4}$     $\frac{10}{8}$     $3\frac{3}{4}$    3

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