

Name:

Date:

Maths Assessment Year 5 Term 3: Fractions

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

a) Use the symbols $<$, $>$ or $=$ to compare these fractions:

	< or >	
$\frac{4}{5}$		$\frac{9}{10}$
$\frac{7}{12}$		$\frac{3}{6}$
$\frac{3}{4}$		$\frac{9}{12}$

b) Order these fractions from smallest to largest:

$$\frac{5}{6} \quad \frac{21}{24} \quad \frac{11}{12} \quad \frac{2}{3}$$

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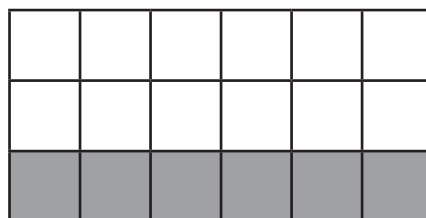
smallest largest

3 marks

1 mark

2. Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.

a) Here is a rectangle. $\frac{6}{18}$ of the square has been shaded. Use the diagram to help you write two equivalent fractions of $\frac{6}{18}$.



$$\frac{6}{18} = \boxed{} = \boxed{}$$

2 marks

b) Write 3 fractions equivalent to $\frac{3}{4}$:

$$\frac{3}{4} = \boxed{}$$

$$\frac{3}{4} = \boxed{}$$

$$\frac{3}{4} = \boxed{}$$

3 marks

Total for this page

3. Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$].

a) Draw lines to match the following improper fractions and mixed numbers:

improper fraction		mixed number
$\frac{14}{4}$		$4\frac{1}{4}$
$\frac{17}{4}$		$2\frac{1}{4}$
$\frac{15}{4}$		$3\frac{3}{4}$
$\frac{9}{4}$		$3\frac{1}{2}$

b) Complete the following table:

Improper fraction	Mixed number
$\frac{12}{5}$	
$\frac{19}{6}$	
	$2\frac{7}{8}$
	$1\frac{1}{2}$

c) Add these fractions and write the answer as a mixed number:

$$\frac{5}{8} + \frac{7}{8} = \boxed{}$$

$$\frac{7}{9} + \frac{5}{9} = \boxed{}$$

4. Add and subtract fractions with the same denominator, and denominators that are multiples of the same number.

a) Add the following:

$$\frac{3}{7} + \frac{2}{7} = \boxed{}$$

$$\frac{1}{8} + \frac{1}{4} = \boxed{}$$



4 marks



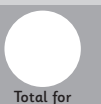
4 marks



2 marks



2 marks



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b) Subtract the following:

$$\frac{7}{12} - \frac{3}{12} = \boxed{}$$

$$\frac{5}{6} - \frac{2}{3} = \boxed{}$$

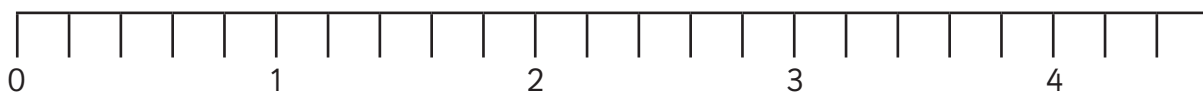


2 marks

5. Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.

Use these diagrams to help you multiply these fractions by a whole number:

$$\frac{1}{5} \times 8 = \boxed{}$$



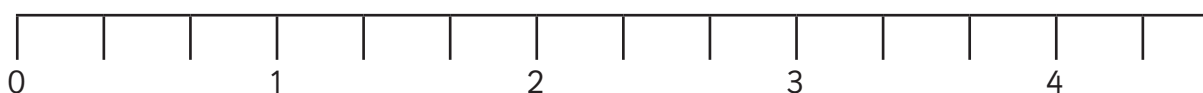
1 mark

$$\frac{5}{6} \times 3 = \boxed{}$$



1 mark

$$1\frac{2}{3} \times 2 = \boxed{}$$



1 mark



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6. Read and write decimal numbers as fractions

Complete this table, writing decimals as fractions and fractions as decimals:

decimals	fractions
	$\frac{16}{100}$
0.07	
0.9	
	$\frac{87}{100}$

4 marks

7. Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.

Complete the missing boxes:

$$\frac{7}{1000} = \boxed{0.}$$

$$\frac{100}{1000} = \boxed{\frac{10}{100}}$$

$$\frac{750}{1000} = \boxed{\frac{75}{100}}$$

3 marks

8. Round decimals with 2 decimal places to the nearest whole number and to 1 decimal place.

a) Circle the numbers which are rounded to 23 when rounded to the nearest whole number:

22.37 23.49 22.87 23.5 22.5 23.67

3 marks

b) Circle the numbers which are rounded to 4.7 when rounded to the nearest:

4.75 4.65 4.62 4.72 4.69 4.76

3 marks

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c) Write the value to which these numbers are rounded:

Number	Rounded to the nearest (e.g. tenth, whole number)	Number to which it is rounded
3.73		4
3.73		3.7
28.92		28.9
28.92		29

4 marks

9. Read, write, order and compare numbers with up to 3 decimal places.

a) Use the symbols $<$ or $>$ to compare these decimals:

	$<$ or $>$	
45.54		45.45
203.02		203.1
781.78		781.779
6067.67		6067.7

4 marks

b) order these numbers from largest to smallest;

55.005

550.05

50.505

550.055

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largest smallest

1 mark

10. Solve problems involving number up to 3 decimal places.

1 pint = 0.568 litres

a) A recipe says Jack needs $1 \frac{1}{2}$ pints of stock, but he only has a litre measuring jug. How much stock should he use?

1 mark

Total for this page

b) 1 gallon is 8 pints. How many litres is 1 gallon?



2 marks

11. Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per 100', and write percentages as a fraction with denominator 100, and as a decimal fraction.

Complete this table:

percentage	fraction	decimal
		0.34
	$\frac{7}{10}$	
99%		
		0.06
	$\frac{46}{100}$	



5 marks



Total for this page

12. Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25.

a) In a class of children 40% of the children are boys. What fraction of the class are girls?



1 mark

b) There are 18 girls. How many children in the class altogether?



2 marks

c) 25% of the boys wear glasses. How many boys wear glasses?



1 mark



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