

Name:

Date:



Maths Assessment Year 5 Term 2: 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 >	
$\frac{1}{2}$		$\frac{5}{10}$
$\frac{7}{16}$		$\frac{3}{8}$
$\frac{2}{3}$		$\frac{9}{12}$

b) Order these fractions from smallest to largest:

$\frac{2}{5}$ $\frac{3}{10}$ $\frac{3}{15}$ $\frac{9}{20}$

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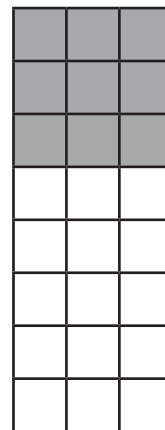
smallest largest

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. $\frac{9}{24}$ of the rectangle has been shaded. Use the diagram to help you write two equivalent fractions of $\frac{9}{24}$.



$\frac{9}{24} = \boxed{} = \boxed{}$

2 marks

b) Identify the fractions that are equivalent to $\frac{3}{5}$

$\frac{8}{13}$ $\frac{6}{15}$ $\frac{7}{12}$ $\frac{9}{15}$ $\frac{6}{10}$ $\frac{7}{10}$ $\frac{12}{20}$

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) Convert these improper fractions into mixed numbers and vice versa:

improper fraction	mixed number
$\frac{14}{6}$	
	$2\frac{3}{4}$
$\frac{13}{4}$	
$\frac{5}{3}$	
	$4\frac{1}{3}$
$\frac{11}{5}$	
	$2\frac{5}{6}$
	$5\frac{1}{2}$

b) Write the answers as both mixed and improper fractions.

$$\frac{5}{6} + \frac{2}{6} = \boxed{} \boxed{}$$

$$\frac{7}{12} + \frac{11}{12} = \boxed{} \boxed{}$$

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

a) Add the following:

$$\frac{2}{10} + \frac{7}{10} = \boxed{}$$

$$\frac{1}{3} + \frac{1}{6} = \boxed{}$$

8 marks

2 marks

2 marks

Total for this page

b) Subtract the following:

$$\frac{6}{7} - \frac{3}{7} = \boxed{}$$

$$\frac{7}{12} - \frac{1}{4} = \boxed{}$$



2 marks

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

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

$$\frac{2}{3} \times 5 = \boxed{}$$



1 mark

$$\frac{3}{8} \times 4 = \boxed{}$$



1 mark

$$2\frac{1}{4} \times 3 = \boxed{}$$



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
0.51	
	$\frac{7}{10}$
0.12	
	$\frac{4}{100}$

4 marks

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

Complete the missing boxes:

$$\frac{31}{1000} = \boxed{0.}$$

$$\frac{550}{1000} = \boxed{\frac{\quad}{100}}$$

$$\frac{900}{1000} = \boxed{\frac{\quad}{10}}$$

3 marks

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

a) Round these numbers to the nearest whole number:

17.09	
291.82	
34.53	
199.49	
2652.14	

5 marks

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b) Round These numbers to 1 decimal place:

2.76	
34.05	
478.92	
1900.38	
3891.02	

5 marks

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

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

	$<$ or $>$	
31.09		31.9
345.76		345.759
208.66		208.666
3001.03		3001.12

4 marks

b) order these numbers from largest to smallest;

7.077 77.007 7.707 7.7

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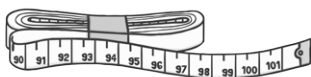
largest smallest

1 mark

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

1 inch = 2.54 cm

a) Tom measures the width of a square as 9.5 inches, but needs to convert it to centimetres. What is 9.5 inches in cm?



1 mark

Total for this page

1 cm = 0.394 inches

b) Tom now needs to convert a measurement of 15cm back into inches. What is 15cm in inches?

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
	$\frac{1}{2}$	
25%		
		0.66
2%		
	$\frac{80}{100}$	

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.

Here are the prices of football shirts in 2 different shops:

Sports World



Shirt £25

Football Heaven



Shirt £24

In the Sales, Sports World reduces the shirt by 20% and Football Heaven cuts the price by $\frac{1}{4}$. How much would each shirt cost? Show your working out.

4 marks

Total for this page