Fractions
End-of-Strand Assessment

Name: _____ Date: _____

1. Using mental methods, complete these calculations.

$\frac{3}{10} + \frac{5}{10} = \frac{\square}{\square}$

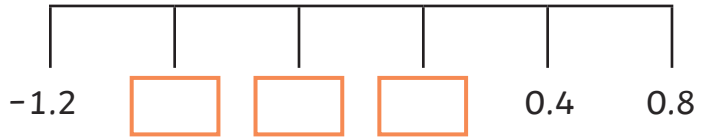
$1\frac{2}{10} + \frac{6}{10} = \square\frac{\square}{\square}$

$\frac{8}{10} - \frac{5}{10} = \frac{\square}{\square}$

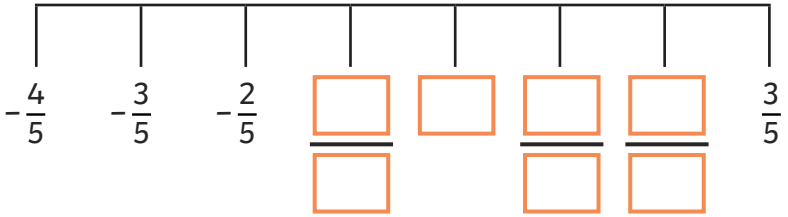
$3\frac{2}{10} - \frac{4}{10} = \square\frac{\square}{\square}$

2 marks

2. a) Count backwards along the number line to fill in the missing decimals.



b) Count forwards along the number line, in fifths, to fill in the missing numbers.



2 marks

3. In each bar model, there are missing digits shown by letters. A represents the same digit whenever it is used, as does B. Identify the digits represented by A and B to make these bar models correct.

20	
10.41A	A.581

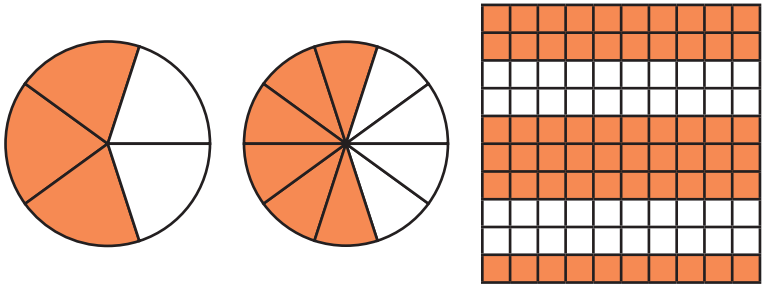
16.4B	
1B.90B	3.518

A: ☐

B: ☐

2 marks

4. a) Complete the equivalent fractions represented by the diagrams.



$\frac{\square}{5}$ $\frac{6}{\square}$ $\frac{\square}{\square}$

b) Sort the fractions below into the table according to whether they are equivalent or not equivalent to the fractions shown above.

$\frac{9}{15}$ $\frac{4}{7}$ $\frac{18}{30}$ $\frac{120}{200}$ $\frac{15}{20}$ $\frac{30}{50}$ $\frac{40}{60}$

Fractions Equivalent to the Ones Shown Above	Fractions Not Equivalent to the Ones Shown Above

2 marks

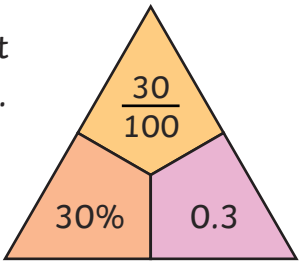
5. Circle the mathematical statements that show the correct equivalent decimal numbers and fractions.

$0.97 = \frac{97}{10} = \frac{970}{100}$ $0.71 = \frac{71}{100} = \frac{710}{1000}$

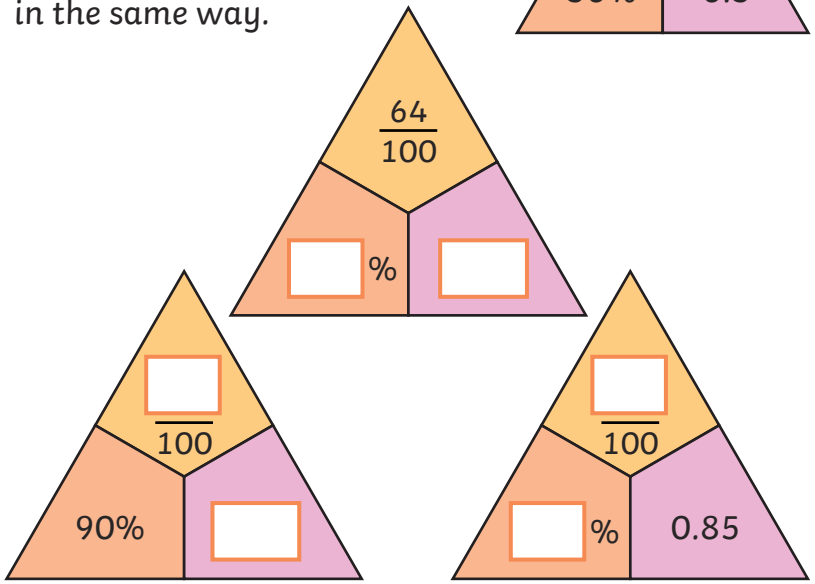
$0.4 = \frac{4}{10} = \frac{400}{1000}$ $2.4 = \frac{24}{10} = \frac{240}{1000}$

1 mark

6. This triangle shows an equivalent fraction, decimal and percentage.



Complete these triangles in the same way.



1 mark

7. Round these numbers to the nearest whole number and to 1 decimal place.

	Rounded to the Nearest Whole Number	Rounded to 1 Decimal Place
6.46		
30.07		
24.82		

2 marks

8. Order these fractions from smallest to greatest.

$\frac{3}{4}$ $\frac{11}{16}$ $\frac{6}{16}$ $\frac{5}{8}$ $\frac{21}{32}$ $\frac{2}{8}$

$\square$ $\square$ $\square$ $\square$ $\square$ $\square$

ascending order

2 marks

9. A group of friends have some money to spend between them in a sweet shop. Write the amount that each child can spend as an equivalent percentage and decimal.

a) Bob: $\frac{1}{4}$ = $\square$ % = $\square$

Dina: $\frac{1}{25}$ = $\square$ % = $\square$

Faisa: $\frac{1}{2}$ = $\square$ % = $\square$

Kenny: $\frac{1}{5}$ = $\square$ % = $\square$

b) What percentage of the money do they have left when they have all spent their money?

$\square$ %

c) Dina says that, together, Kenny, Bob and Faisa have spent $\frac{3}{4}$ of the money. Is she correct? Explain your reasoning.

3 marks

10. Use addition or subtraction to complete the calculations.

$\frac{12}{21} - \frac{5}{21} = \frac{\square}{\square}$

$2 - \frac{3}{5} - \frac{8}{10} = \frac{\square}{\square}$ or $\frac{\square}{\square}$

$\frac{2}{3} + \frac{3}{12} + \frac{5}{6} = \frac{\square}{\square}$ or $\square\frac{\square}{\square}$

$9.814 + 2.28 = \square$

$5 - 4.027 = \square$

$0.508 + \square = 1$

2 marks

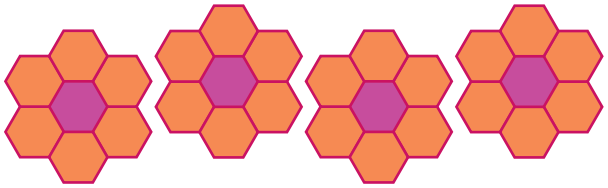
11. Soil has been measured out for different gardening projects and has been recorded in different ways. Complete the missing numbers in the table to show the equivalent quantities.

Project	Grams	Kilograms (Decimal)	Kilograms (Fraction)
A	$\square$ g	4.5kg	$4\frac{1}{2}$kg
B	$\square$ g	5.18kg	$5\frac{180}{1000}$kg
C	9060g	$\square$ kg	$\square\frac{\square}{1000}$ kg
D	$\square$ g	12.35kg	$\square\frac{\square}{100}$ kg

2 marks

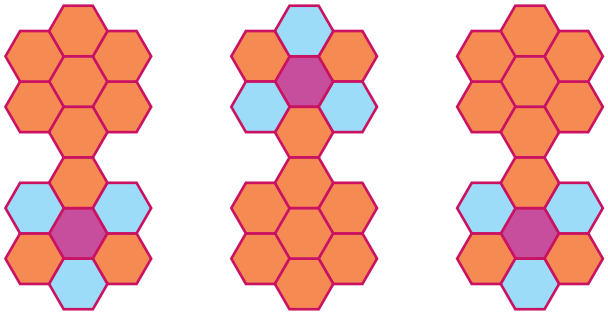
12. A pattern is made with flowers.

a) What is the total fraction shaded orange in the pattern below? Write your answer as a mixed number.



$\square/\square \times 4 = \square\ \square/\square$

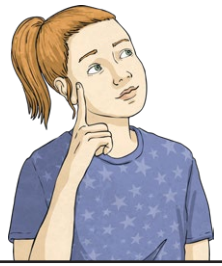
b) What is the total fraction shaded orange in this pattern? Write your answer as a mixed number.



$3 \times \square\ \square/\square = \square\ \square/\square$

2 marks

13. Label each column of the table with the correct heading (either Mixed Numbers or Improper Fractions). Then, complete the table, writing the answer to each calculation in both forms.



	$\square/\square$	$2\frac{1}{4}$
	$\frac{31}{5}$	$\square\ \square/\square$
$\frac{4}{6} + \frac{5}{6} =$	$\square/\square$	$\square\ \square/\square$
$\frac{5}{3} + \frac{11}{3} =$	$\square/\square$	$\square\ \square/\square$

2 marks

14. a) Use < or > to compare each pair of decimal numbers.

6.266 ☐ 2.260

37.307 ☐ 37.370

94.049 ☐ 49.904

b) Write these numbers in descending order.

8.306 8.096 6.983 86.093 6.093

2 marks

15. Four phones are reviewed by different numbers of people. The percentages of good reviews are shown below. How many people wrote a good review for each product?

Phone 1: 50% of 160 people = ☐ people

Phone 2: $\frac{1}{4}$ of 88 people = ☐ people

Phone 3: 75% of 200 people = ☐ people

Phone 4: $\frac{2}{5}$ of 150 people = ☐ people

2 marks

Total 29 marks