Mathematics

Reasoning: Set 1 Test A

Name	
Date	

/ 23
total marks

Name: Date:

Maths Reasoning: Set 1 Test A

1. Continue these sequences.

a)

24	32	40	48			

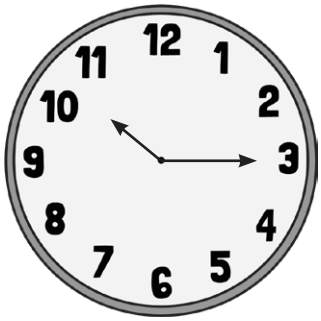
1 mark

b)

350	300	250	200			

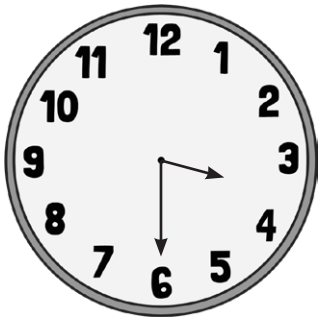
1 mark

2. Match the following 24-hour times to the clocks.



15:30

22:15



18:45

1 mark

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3. Write a number sentence to compare these two numbers, writing the numbers in numerals and using either =, < or >.

three hundred and seventeen

three hundred and seventy two

2 marks

4. Measure the length of this line in centimetres.

cm

1 mark

5. Here are some digit cards:

3	4	8

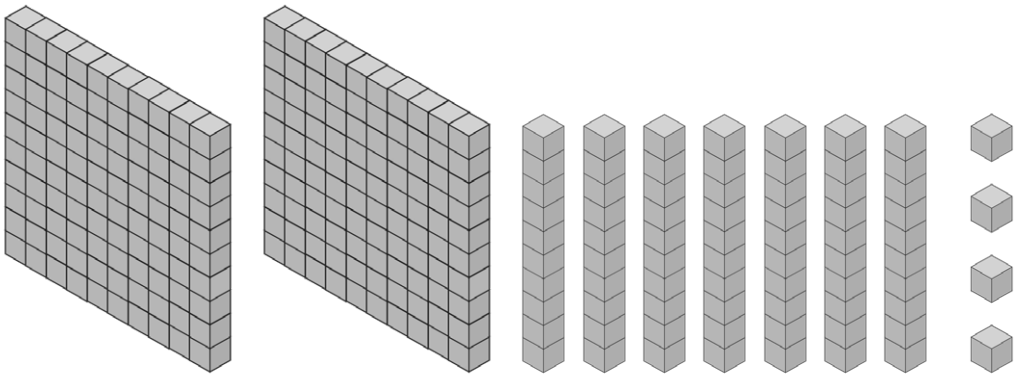
Use each digit card once to complete the following:

6 x ☐ = ☐ x ☐

2 marks

6.

a) Write the number represented by these blocks, sticks and cubes.



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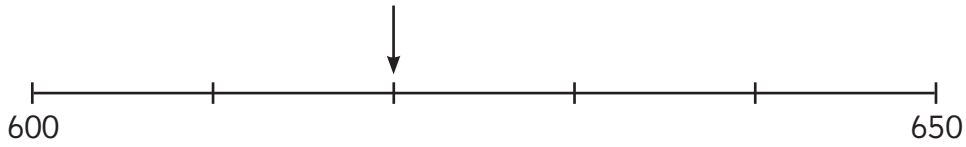
b) What number is represented by the arrow on this number line?



1 mark

7. Draw a rectangle and a right-angled triangle on this grid.

2 marks

8. Class One decided to find out the favourite fruit of their class. They recorded the result in this pictogram.

Banana	● ● ● ● ● ●
Apple	● ● ● ● ◗
Orange	● ● ● ◗
Grapes	● ●

Key

● = 2 children

a) How many more children chose banana as a favourite fruit than apples?

1 mark

b) How many children took part in the survey?

1 mark

Total for this page

9. Order the following fractions from smallest to largest.

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

smallest largest

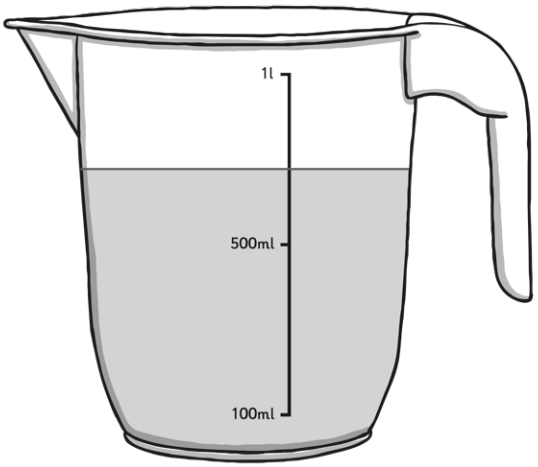
1 mark

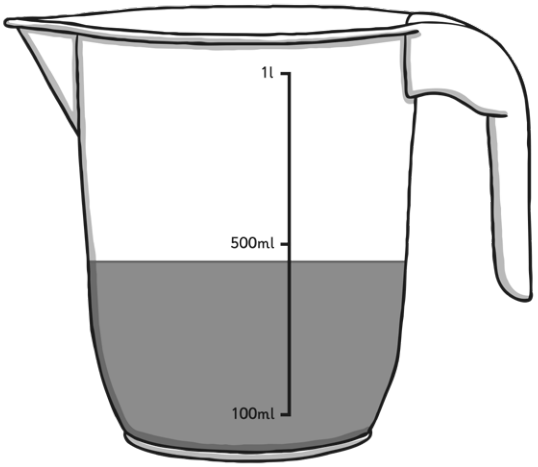
10. A school buys some tennis sets. Each set has 2 racquets and 5 tennis balls. The school buys enough sets to have 10 racquets.

How many tennis balls will be in the sets?

2 marks

11. Here are 2 jugs of juice. How much more orange juice is there than blackcurrant juice?





1 mark

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12. Here are 4 fraction cards.

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

a) Choose 2 cards with a total of one whole.

____ + ____ = 1

1 mark

b) Choose 3 cards with a total of one whole.

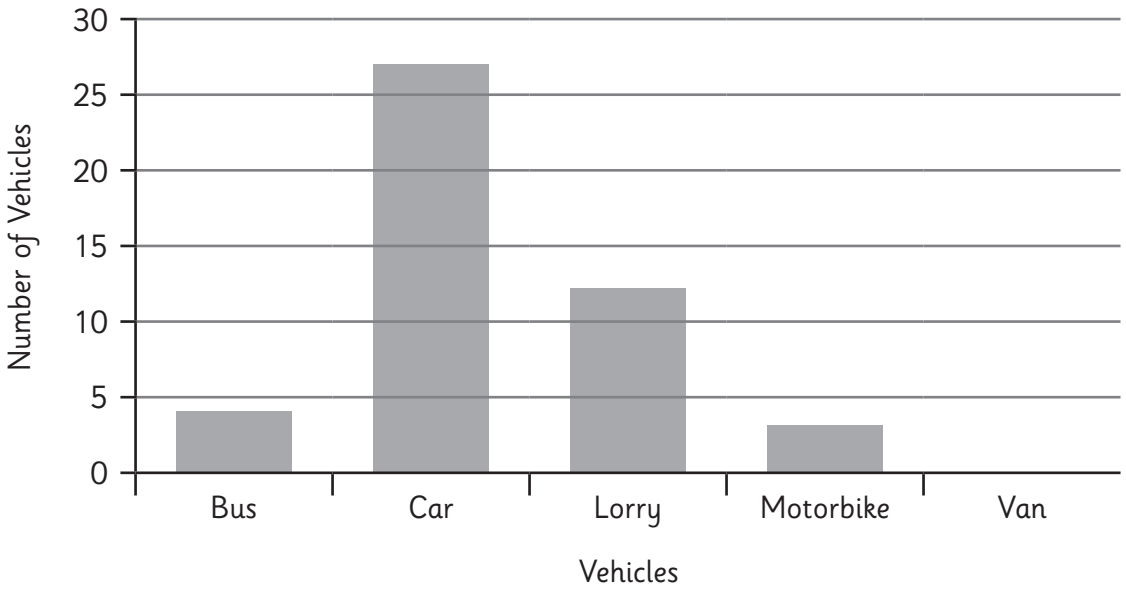
____ + ____ + ____ = 1

1 mark

13. Some children record the number of different vehicles that drive past the school in one hour.

They record the results in a table and draw a bar chart. Complete the table and bar chart.

Vehicle	Number of Vehicles
Bus	4
Car	
Lorry	12
Motorbike	3
Van	14



2 marks

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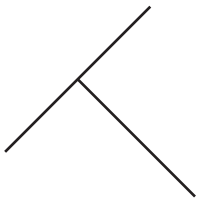
14. Here are 3 pairs of lines. Put a tick under any set that are parallel.



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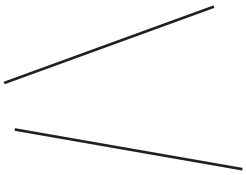

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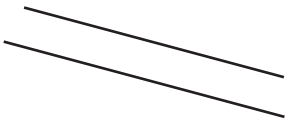

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1 mark

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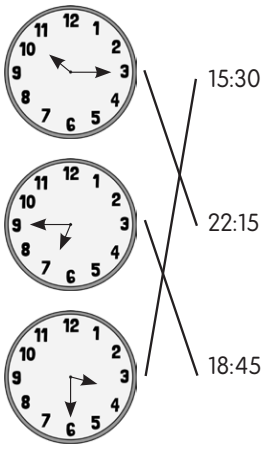
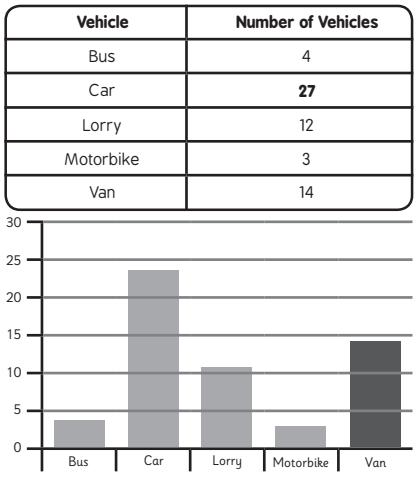
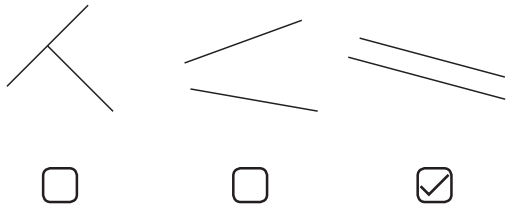
question	answer	marks	notes
1. 3N1b: Count in 8 and 50.			
a	56, 64, 72	1	
b	150, 100, 50	1	
2. 3M4b: 24 hour time match.			
		1	
3. 3N2a: Compare numbers written in words.			
	317 < 372 **or** 372 > 317	2	1 mark for correctly writing the two numbers in numerals 1 mark for correctly comparing the 2 numbers written (even if written in numerals incorrectly).
4. 3M2a: Measure lengths.			
	14cm	1	
5. 3C6: Times tables question (3,4,8).			
	6 x 4 = 3 x 8 or 6 x 4 = 8 x 3	2	
6. 3N4: Representations of a number.			
a	274	1	Allow any answer that is a multiple of 284, where a cube is not 1.
b	620	1	Allow 617 to 623.
7. 3G3a: Draw 2D shape.			
	rectangle and right-angled triangle drawn	2	1 mark for each shape. Grid lines do not have to be used but the shapes must have accurate right angles.

question	answer	marks	notes
8. 3S2: Pictogram.			
a	3	1	
b	32	1	
9. 3G3b: Order unit fraction.			
	$\frac{1}{6}$ $\frac{1}{3}$ $\frac{1}{2}$	1	
10. 3F3: Integer scaling.			
	25	2	2 marks for correct answer 1 mark for indicating 5 packs are purchased with incorrect answer, or incorrect number of packs multiplied by 5.
11. 3M2c: Measure volume.			
	250 ml	1	
12. 3F10: Fraction problem.			
a	$\frac{3}{8} + \frac{5}{8}$	1	
b	$\frac{1}{8} + \frac{3}{8} + \frac{4}{8}$	1	
13. 3S1: Bar chart.			
		2	1 mark for completing the table, and 1 mark for drawing the bar (allow between 13 and 15 but not including 15).

question	answer	marks	notes
14. 3G2: Parallel lines.			
	 ☐ ☐ ☑	1	
		Total 23	