

Name:

Date:

24  
total marks

## Year 3 Reasoning Test Set 2 Paper A

1. a. Josie counts in 8s up to 96 without making any mistakes. Circle the following numbers she will include as she counts:

32      44      50      56      74      88

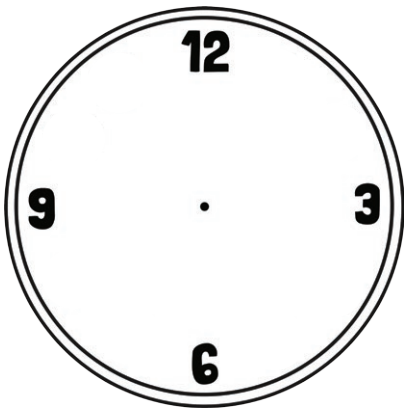
1 mark

- b. Amit counts in 100s starting from and including 0. What will be the 3rd, 6th and 11th numbers that he says?

3rd =       6th =       11th =

1 mark

2. Draw the time 2.45pm on this analogue clock face.



1 mark

3. a. Order the following numbers from smallest to largest.

65      656      556      56      565

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smallest

largest

1 mark

- b. Use the digits 2 and 5 to write four numbers in order from smallest to largest.

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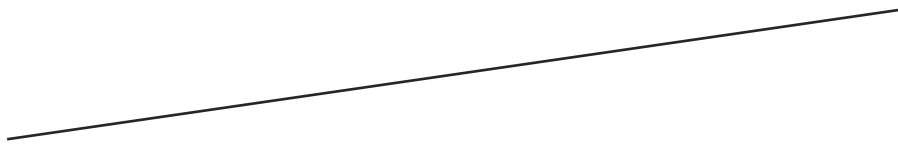
smallest

largest

1 mark

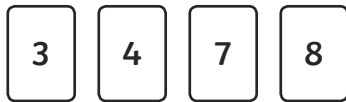
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4. Measure the length of this line:




1 mark

5. Here are 4 four-digit cards.



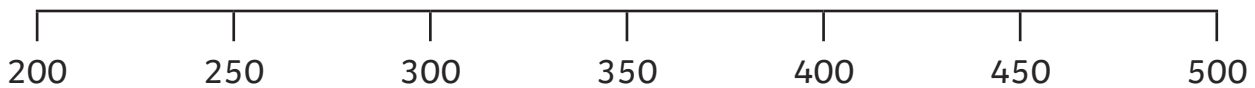
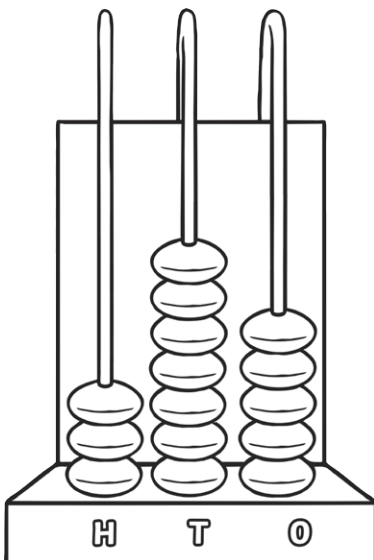
Complete the following using all four digit cards:

$$\square \times \square = 24$$

$$\square \times \square = 28$$

1 mark

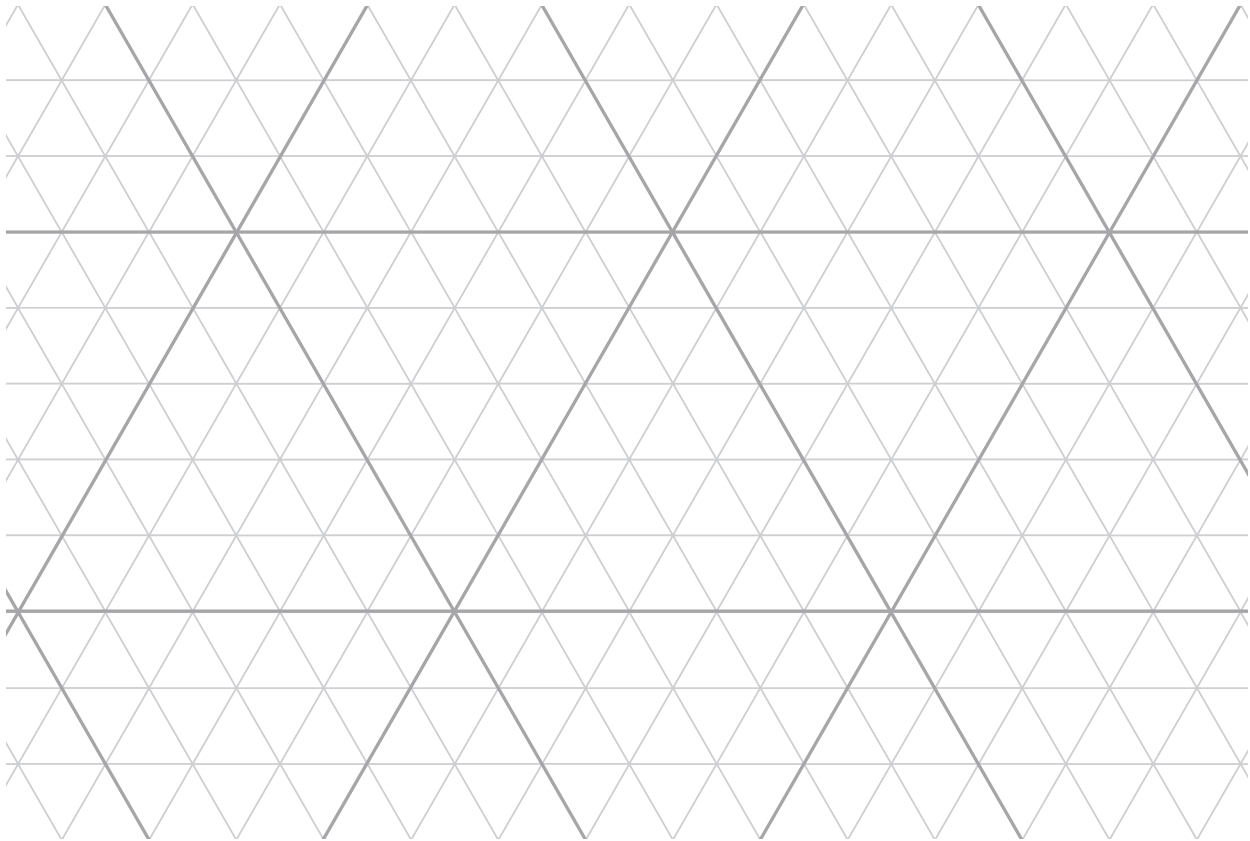
6. Draw the number represented by the abacus on the number line.




2 marks

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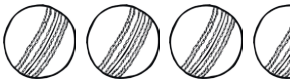
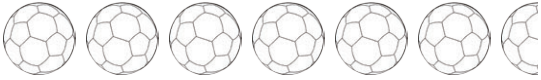
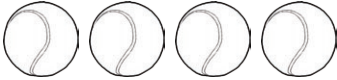

7. Draw a hexagon and a parallelogram on this triangular grid. Use a ruler.



2 marks

8. A class of Year 3 children chose their favourite sport that uses a ball.

Each ball will represent 2 children

Cricket	
Football	
Tennis	
Hockey	

a. How many fewer children chose tennis than football?

1 mark

b. How many children took part in the survey?

1 mark

total for this page

9. Compare these fractions using one of these symbols: <, = or >

$$\boxed{\frac{1}{3}} \quad \boxed{\phantom{0}} \quad \boxed{\frac{1}{5}}$$

1 mark

10. Fill in the missing digits to complete this calculation:

$$\begin{array}{r} 4 \quad \boxed{\phantom{0}} \quad 5 \\ + \quad \quad 6 \quad 2 \\ \hline 5 \quad 2 \quad \boxed{\phantom{0}} \end{array}$$

2 marks

11. Alison has the following coins in her purse.



She buys a magazine for £1.35.

Draw the coins with which she would pay and the coins she could be given as change. Simply draw a circle and write the amount in the coin.

Coins used to pay	Coins in the change

2 marks

total for this page

12. Complete these sequences.

a.

$\frac{3}{10}$	$\frac{4}{10}$	$\frac{5}{10}$			
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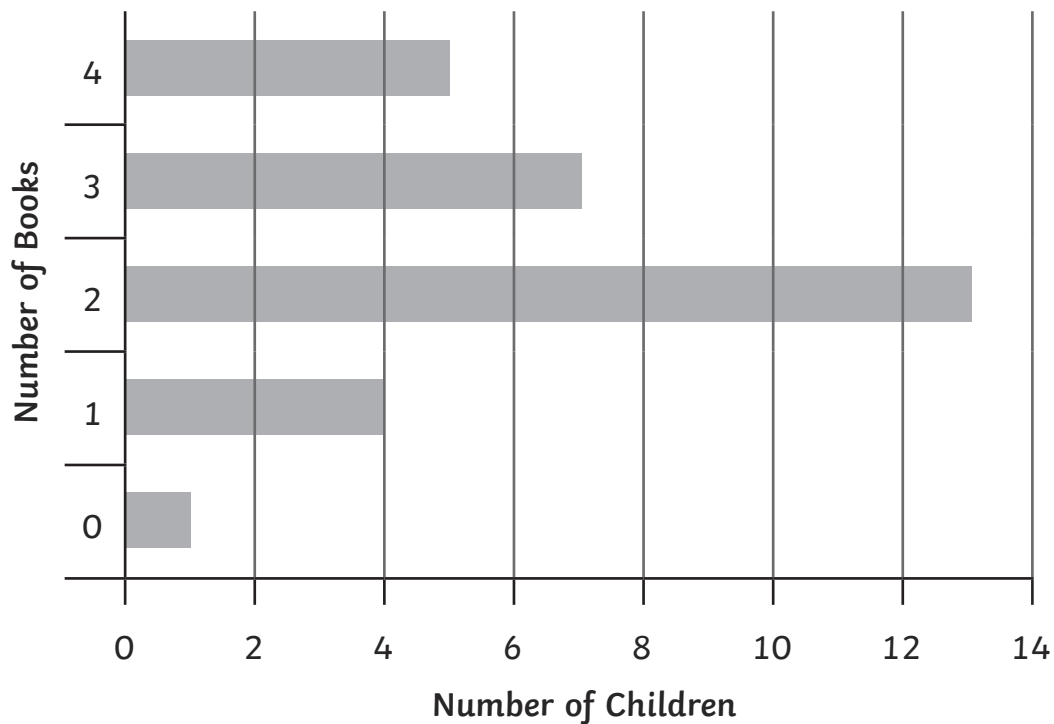
1 mark

b.

$\frac{7}{10}$	$\frac{6}{10}$		$\frac{4}{10}$		
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1 mark

13. A teacher records how many books each child reads in a week.



a. How many more children read 2 books than 3 and 4 books?

1 mark

b. How many children read less than 2 books?

1 mark

total for this page

14. Samit says that  $72 \div 4 = 18$

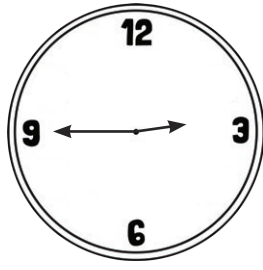
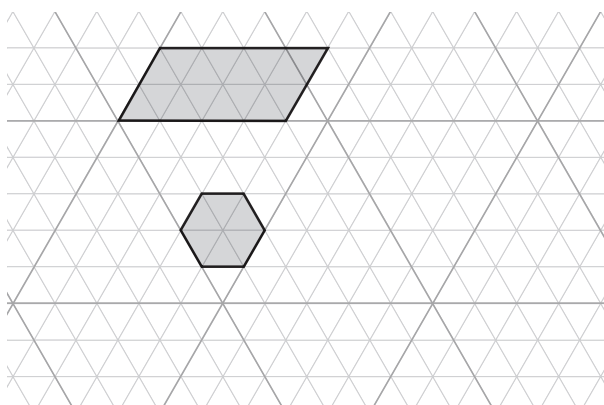
a. What different calculation can you use to check the answer?

1 mark

b. Use your calculation to check Samit's answer:

1 mark

total for  
this page

Question	Answer	Marks	Notes
<b>1. Josie counts in 8s up to 96 without making any mistakes. Which of the following numbers will she include as she counts:</b>			
a	32, 56 and 88	1	All three with no mistakes for a mark
b	200, 500 and 1000	1	All three with no mistakes for a mark
<b>2. Draw the time 2.45pm on this analogue clock face.</b>			
		1	The hour hand must be between half way between 2 and 3 and 3 itself
<b>3. Order the following numbers from smallest to largest.</b>			
a	56, 65, 556, 565, 656	1	
b	numerous possibilities, e.g. 25, 52, 225, 552	1	
<b>4. Measure the length of this line:</b>			
	12cm	1	The line will only be 12cm if the test is printed at 100%. The default for pdf files is usually 97%.
<b>5. Here are 4 four-digit cards.</b>			
	$3 \times 8 = 24$ or $8 \times 3 = 24$ $4 \times 7 = 28$ or $7 \times 4 = 28$	1	2 marks for both correct 1 mark if only 1 correct
<b>6. Draw the number represented by the abacus on the number line.</b>			
	Show half way between 350 and 400	2	2 marks for accurately showing 375, allowing a small degree of error. 1 mark for between 350 and 400 but not half way between.
<b>7. Draw a hexagon and a parallelogram on this triangular grid. Use a ruler.</b>			
		2	Hexagon must have six straight sides but can be irregular. Parallelogram must have two pairs of parallel sides but needn't keep to the given lines. 1 mark for each.

Question	Answer	Marks	Notes
<b>8.</b> A class of Year 3 children chose their favorite sport that uses a ball.			
a	5	1	
b	32	1	
<b>9.</b> Compare these fractions using one of these symbols: <, = or >			
	$\frac{1}{3} > \frac{1}{5}$ or $\frac{1}{5} < \frac{1}{3}$	1	
<b>10.</b> Copy this question with the numbers 4_5 + 62 = 52_			
	$\begin{array}{r} 4 \quad \mathbf{6} \quad 5 \\ + \quad \quad 6 \quad 2 \\ \hline 5 \quad 2 \quad \mathbf{7} \end{array}$	2	1 mark for each digit
<b>11.</b> Alison has the following coins in her purse.			
	Pay with £1.50 or £1.60	2	Change is 15p or 25p respectively. (It would be reasonable to pay with £1.60 if shop has no 10ps for change, but not £1.70). 2 marks for correct answer. 1 mark for paying with £1.70 and 35p change. Change can be in any format of coins.
<b>12.</b> Complete these sequences.			
a	$\frac{6}{10}, \frac{7}{10}, \frac{8}{10}$	1	All three correct for the mark
b	$\frac{5}{10}, \frac{3}{10}, \frac{2}{10}$	1	All three correct for the mark
<b>13.</b> A teacher records how many books each child reads in a week.			
a	1	1	
b	5	1	
<b>14.</b> Samit says that $72 \div 4 = 18$			
a	$18 \times 4 =$	1	
b	$18 \times 4 = 72$	1	Any method is valid.