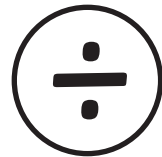
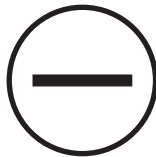


Key stage 2

Mathematics

Reasoning: Set 1 Paper B

Name	
Date	



total marks

Name:

Date:

35
total marks

twinkl

Year 5 Maths Reasoning Test Set 1: Paper B

1. A farmer has 1045 sheep. He sells 100 of the sheep. How many does he have left?



1 mark

2. Here is a jug containing some juice.



a) Half of the juice is used. On the jug below mark on the scale the new level of the juice.



1 mark

b) A further 150 ml of juice is used. How much juice is left in the jug in litres?



1 mark



Total for this page

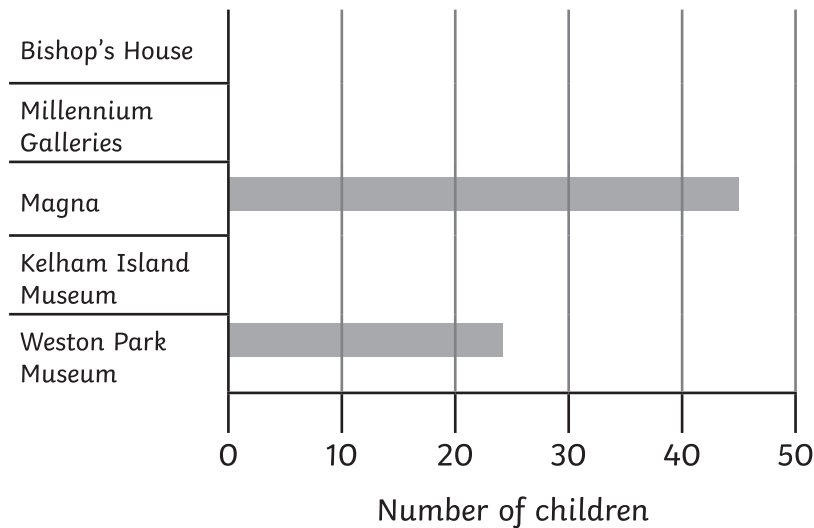
a) How many places have had 25 or more children visit?

1 mark

b) Two weeks after the survey, the children find out if anyone else has visited any of these places of interest. They record these extra children in this table.

Place of interest	Number of children
Bishop's House	8
Millennium Galleries	4
Kelham Island Museum	4

Add these children to the bar graph below.



1 mark

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

$$\begin{array}{r} 7 \quad \square \quad 6 \\ \times \quad \quad \square \\ \hline 2 \quad 9 \quad 0 \quad 4 \end{array}$$

1 mark

Total for this page

6. Some children from two Year 5 classes collect some money for Sport Relief by running around the playground and getting their parents to sponsor them. The amounts collected by each class are £36.27 and £42.89.

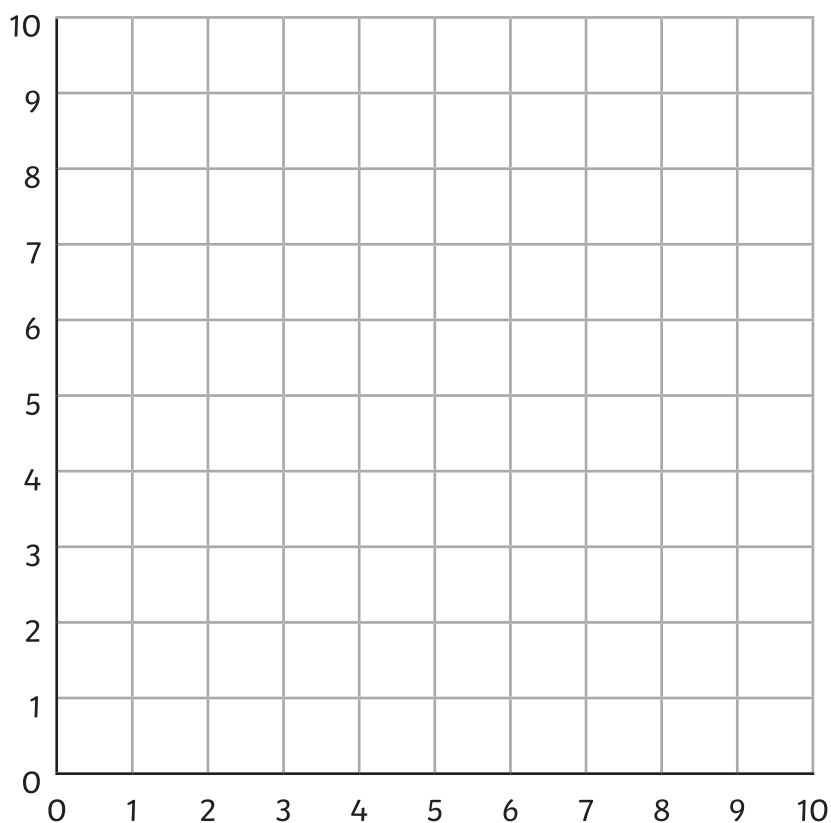
Their teachers offer to make the money up to £100. How much will the teachers donate?



2 marks

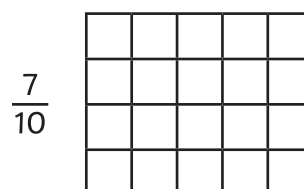
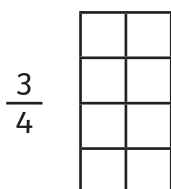
7. Here are the coordinates for a shape drawn on a coordinates grid: (1,2) (9,2) (7,8) (3,8)

Draw the shape on this grid.



2 marks

8. Shade the following shapes so that the amount shaded is equivalent to the fraction shown.



2 marks



Total for this page

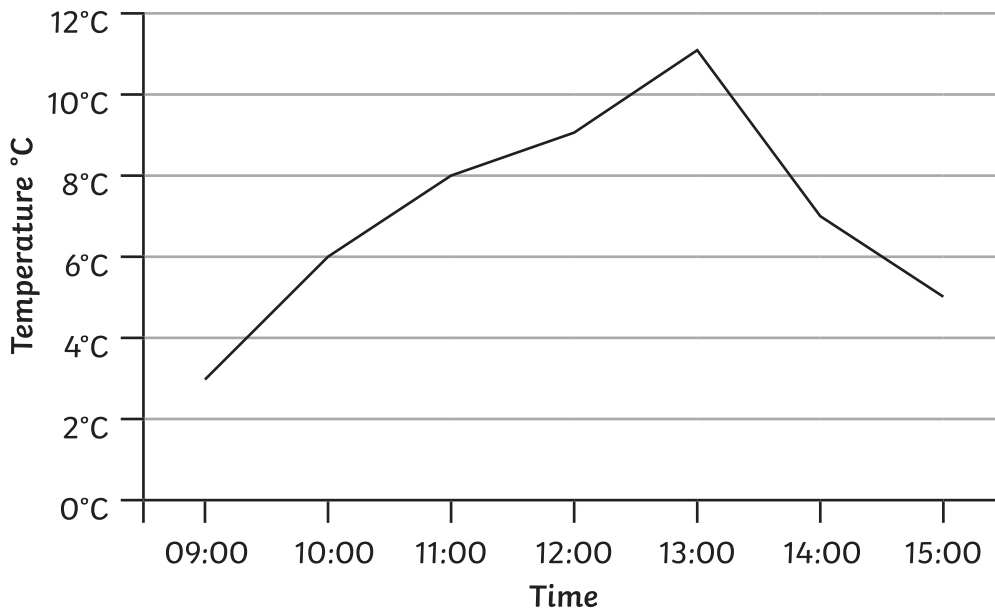
12. £2960 is shared among 1000 people. How much money does each person receive?



1 mark

13. Some children record the temperature in the playground every hour during the school day.

Here is the line graph they used to record their results.



a) How much did the temperature change between and 10:00 and 13:00?



1 mark

b) Estimate the temperature at 13:30.



1 mark

c) The temperature falls by 7°C between 15:00 and 23:00.

What is the temperature at 23:00?



1 mark



Total for this page

18. A steam locomotive railway is running a special weekend to celebrate the film 'The Railway Children.' Here is the timetable.

Service	001	002	003
Haworth Forecourt	10:30	12:55	15:20
Bronte Parsonage Car Park	10:45	13:05	15:35
Marsh Top	10:50	13:10	15:40
Oxenhope Station	11:05	13:25	15:55
Hebden Road	11:08	13:28	16:05
Ingrow Station	11:30	13:50	16:20
Oakworth Park	11:40	14:00	16:30
Providence Lane	11:55	14:05	16:35

a) Which train travels from Haworth Forecourt to Marsh Top the fastest?



1 mark

b) Calculate the length of time the longest journey takes.



1 mark

19. Order the following numbers from smallest to largest.

$$\frac{765}{1000}$$

0.7

$$\frac{75}{100}$$

$$\frac{8}{10}$$

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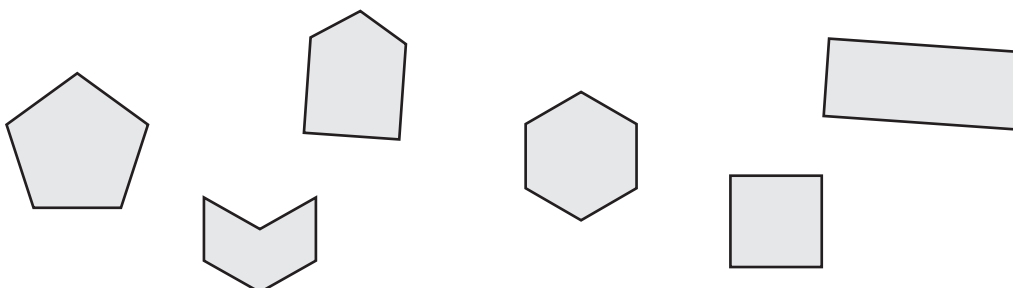
smallest

largest



1 mark


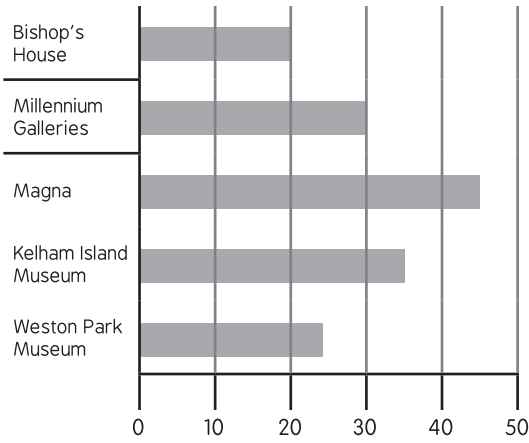
20. Circle the regular shapes.

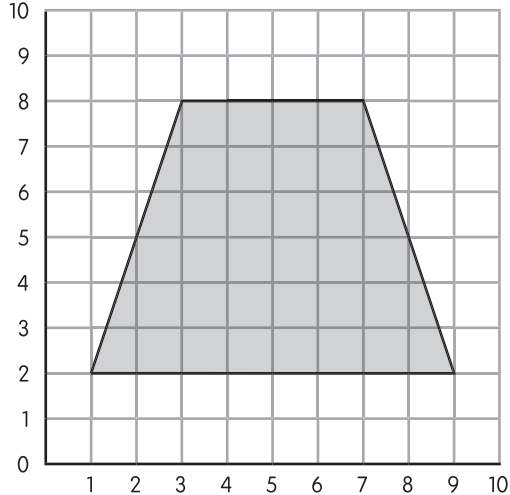
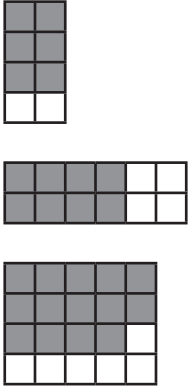


2 marks

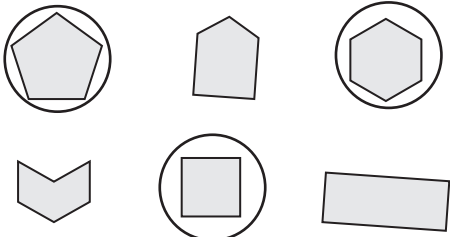


Total for this page

Question	Answer	Marks	Notes
1.			
	945	1	
2.			
a	 <p>(marked at 425ml)</p>	1	Jug mark should be halfway between 400ml and 450ml.
b	0.275l	1	No mark for 275ml
3.			
	45p or £0.45	1	
4.			
a	3 (Millennium Galleries, Magna and Kelham Island Museum)	1	
b		1	
5.			
	$\begin{array}{r} 7 \quad \mathbf{2} \quad 6 \\ \times \quad \quad \mathbf{4} \\ \hline 2 \quad 9 \quad 0 \quad 4 \end{array}$	1	

Question	Answer	Marks	Notes								
6.											
	£20.84	2	2 marks for correct answer. 1 mark for correct method, but 1 mistake in calculation.								
7.											
		2	2 marks for a correct answer. 1 mark for 3 corners correct.								
8.											
		2	2 marks for all 3 correct 1 mark for 2 correct								
9.											
	1 5** *8* Any number with 5 and 8 correctly placed, and a 1 in the millions place.	1									
10.											
	<table border="1" data-bbox="288 1841 799 2080"> <thead> <tr> <th>Name given to the angle</th> <th>Angle</th> </tr> </thead> <tbody> <tr> <td>Acute</td> <td>a, c</td> </tr> <tr> <td>Obtuse</td> <td>b</td> </tr> <tr> <td>Reflex</td> <td>d, e</td> </tr> </tbody> </table>	Name given to the angle	Angle	Acute	a, c	Obtuse	b	Reflex	d, e	2	1 mark for correctly placing a, b and c in the table. 1 mark for correctly writing and spelling "reflex".
Name given to the angle	Angle										
Acute	a, c										
Obtuse	b										
Reflex	d, e										

Question	Answer	Marks	Notes												
11.															
	$36 + 64$ or $6^2 + 8^2$	2	2 marks for correct answer. 1 mark for identifying $102 = 100$.												
12.															
	£2.96	1													
13.															
a	5°C	1													
b	9°C	1													
c	-2°C	1													
14.															
	5 hours 50 minutes	2	2 marks for a correct answer. 1 mark for correctly converting an incorrect answer to 5×70 into hours and minutes, or correctly converting 70 minutes into 1 hour 10 minutes, but incorrectly multiplying this by 5.												
15.															
	<table border="1"> <thead> <tr> <th>Measure</th> <th>In ml</th> <th>in litres</th> </tr> </thead> <tbody> <tr> <td>Teaspoon</td> <td>5ml</td> <td>0.005l</td> </tr> <tr> <td>Dessert Spoon</td> <td>10ml</td> <td>0.01l</td> </tr> <tr> <td>TableSpoon</td> <td>15ml</td> <td>0.015l</td> </tr> </tbody> </table>	Measure	In ml	in litres	Teaspoon	5ml	0.005l	Dessert Spoon	10ml	0.01l	TableSpoon	15ml	0.015l	2	2 marks for all correct 1 mark for 4 correct Allow 0.010 l for dessert spoon
Measure	In ml	in litres													
Teaspoon	5ml	0.005l													
Dessert Spoon	10ml	0.01l													
TableSpoon	15ml	0.015l													
16.															
	$3\ 014\ 304 < 3\ 403\ 413$ or $3\ 403\ 413 > 3\ 014\ 304$	2	2 marks for correct 1 mark if only 1 error: $3\ 014\ 304 > 3\ 403\ 413$ (sign incorrect) $3\ 014\ 340 < 3\ 403\ 413$ (number incorrect) allow use of commas correctly												
17.															
	<table border="1"> <tr> <td>Football</td> <td>Art</td> <td>Dance</td> </tr> </table>	Football	Art	Dance	2	2 marks for correct answer 1 mark for 2 correct 0 marks for Dance, art, football									
Football	Art	Dance													
18.															
a	Train 002	1													

Question	Answer	Marks	Notes				
b	1 hour 25 minutes or 85 minutes (train 001)	1					
19.							
	<table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 25%;">0.7</td> <td style="width: 25%;">$\frac{75}{100}$</td> <td style="width: 25%;">$\frac{765}{1000}$</td> <td style="width: 25%;">$\frac{8}{10}$</td> </tr> </table>	0.7	$\frac{75}{100}$	$\frac{765}{1000}$	$\frac{8}{10}$	1	
0.7	$\frac{75}{100}$	$\frac{765}{1000}$	$\frac{8}{10}$				
20.							
		2	2 marks for all 3 correct. 1 mark for 2 correct and none incorrect.				
		Total 35					