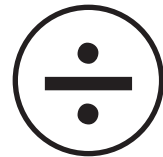
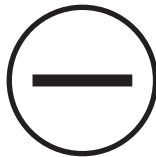


Key Stage 2

Mathematics

Reasoning: Pack 1 Test 1b

Name	
Date	



35

total marks

- 4) A small bottle of lemonade is half the size of a large bottle. The small bottle costs 80p and the large bottle costs £1.50.

Amir buys 4 small bottles. How much would he save if he buys the same amount of lemonade in large bottles?

2 marks

- 5) In the number 348 902.53, in what places are the digits 3?

Answer:

Answer:

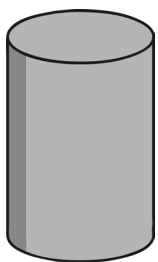
2 marks

- 6) Write the number 532 in Roman numerals:

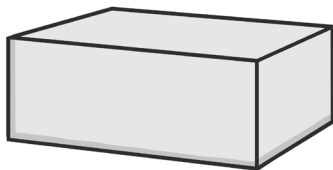
Answer:

1 mark

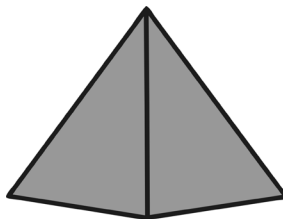
- 7) Write the labels for the following shapes in the Carroll diagram:



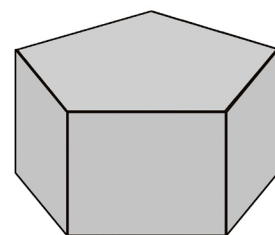
A



B



C



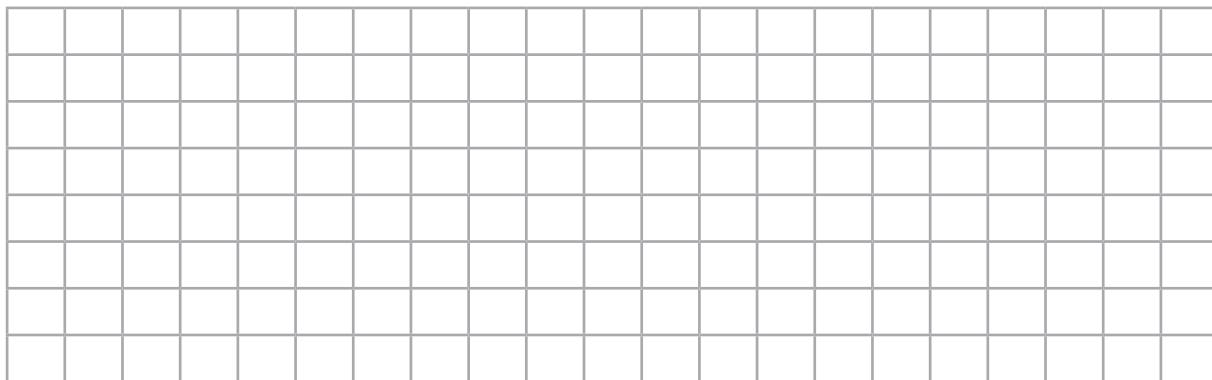
D

	Has 6 or more vertices	Has less than 6 vertices
Has at least one curved face		
Has no curved faces		

2 marks

Total for this page

8) A school takes delivery of some boxes of balls. In each box, there are 5 red balls and 3 blue balls. In the whole delivery, there are 40 red balls. How many balls are there altogether?

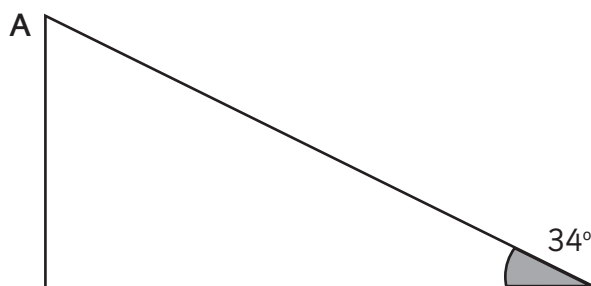


Answer:



2 marks

9) Calculate the size of angle A in this right-angled triangle.

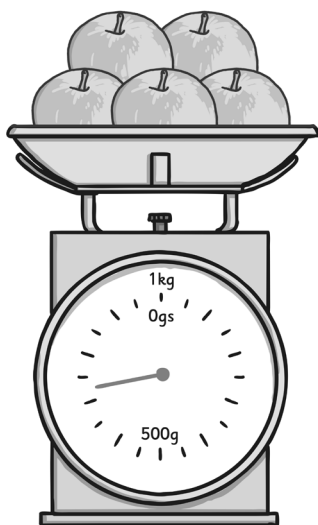


Angle A:



1 mark

10) How heavy are the apples on these scales?



Answer:



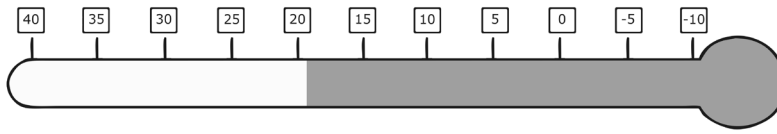
1 mark



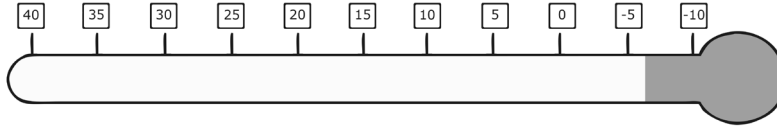
Total for this page

11) These thermometers show the temperature inside and outside of a school at 9 a.m.

Inside



Outside



a) What is the inside and outside temperature?

Inside:

Outside:

1 mark

b) What is the difference in temperature between the inside and the outside?

Answer:

1 mark

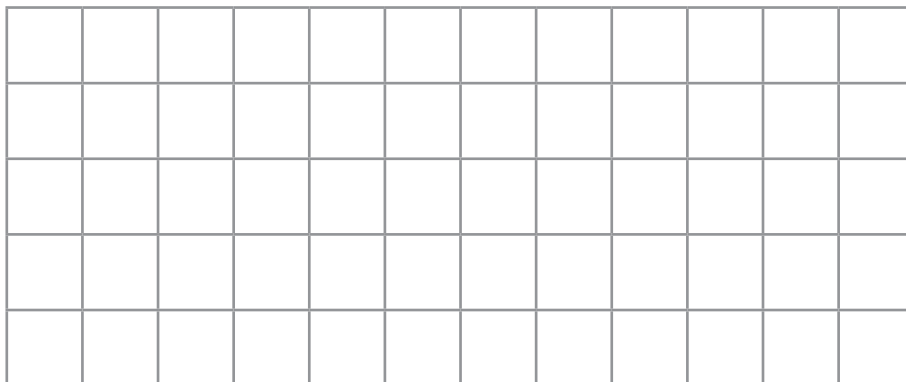
Total for this page

12) Here is a rectangle:



A new rectangle is drawn, which is twice the length and twice the width of the original rectangle.

a) Draw the new rectangle:



Jack says that the area of the new rectangle will be twice the area of the original.

b) Explain why Jack is **not** correct:



1 mark



1 mark



Total for this page

13) Complete this division calculation by filling in the missing numbers:

$$\begin{array}{r} 246 \\ 37 \overline{) _1_2} \\ \underline{74} \\ 17_ \\ \underline{148} \\ 222 \\ \underline{222} \\ 000 \end{array}$$

14) A supermarket sells packs of 6 cans of lemonade. Each can contains 330ml of lemonade.

How many litres of lemonade are there in a pack of 6 cans?

Answer:



2 marks



1 mark



Total for
this page

15) Here is a bus timetable:

Darlington - Sunderland		via Newton Aycliffe, Ferryhill Service 217			
Sunday					
DARLINGTON, Bus Station	19:40	20:40	21:40	...	22:40
Newton Aycliffe, Stephenson Way/Pease Way	20:03	21:03	22:03	...	23:03
Chilton, Wheatsheaf	20:13	21:13	22:13	...	23:18
Coxhoe, Police Station	...	21:39	...	23:09	...
Bowburn, Garage	...	21:44	...	23:14	...
Houghton-le-Spring, Bus Station	...	22:13
SUNDERLAND, Park Lane Bus Station	...	22:29

a) Find the last direct bus from Newton Aycliffe to Bowburn. When does it leave Darlington?

Answer:

1 mark

b) How long does the last bus from Darlington to Chilton take?

Answer:

1 mark

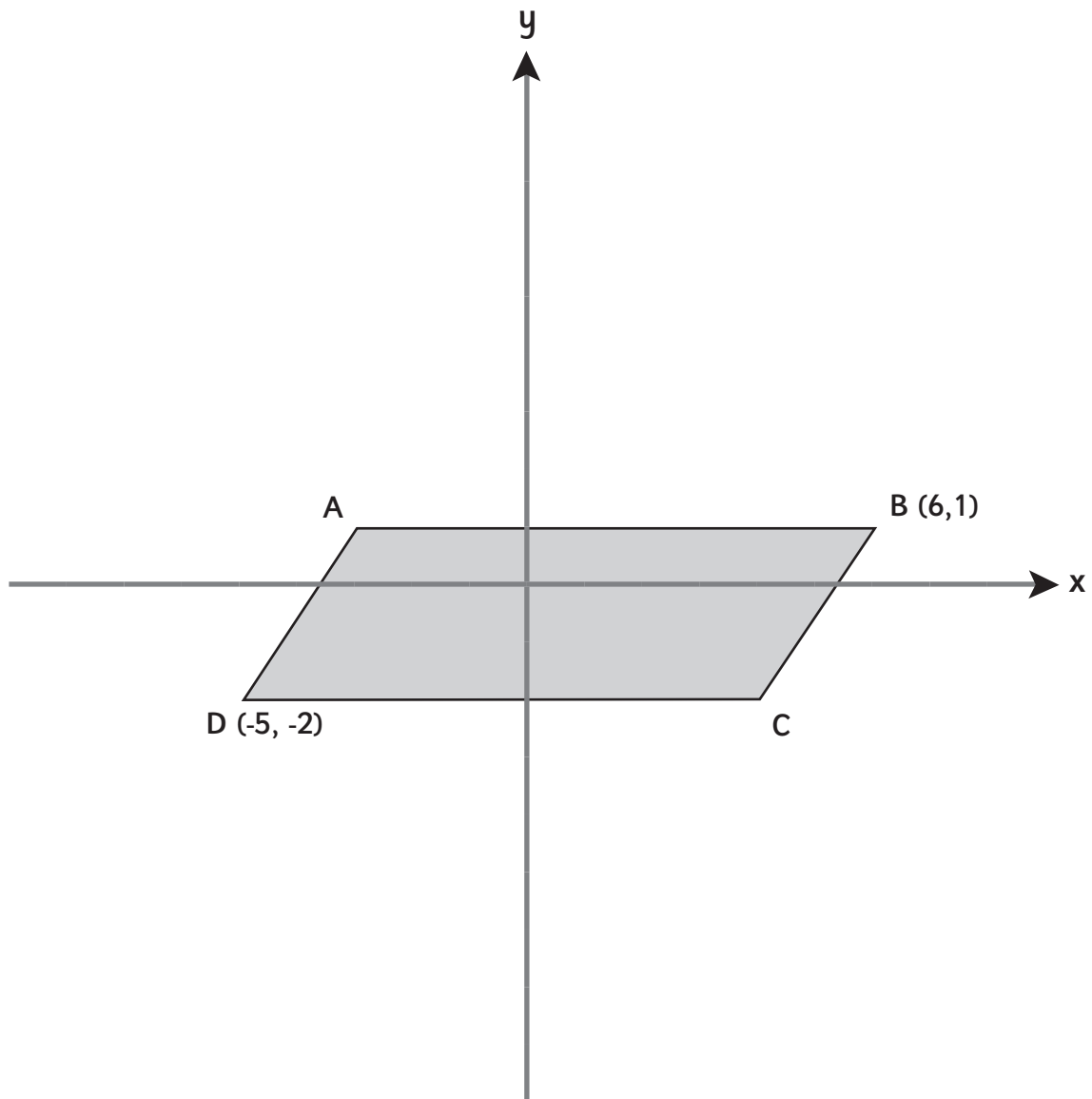
c) How long is the shortest possible journey?

Answer:

1 mark

Total for this page

19) A parallelogram is drawn on this grid:



Write the possible coordinates for corners A and C:

A: ,

C: ,

2 marks

Total for this page

question	answer	marks	notes									
1.												
	$\frac{3}{2}$ $\frac{8}{5}$ $\frac{7}{4}$	1										
2.												
	7	1										
3.												
a	$4n+2$	1										
b	42	1	1 mark if correct answer based on answer to 3a									
c	$n = 61$	1										
4.												
	20p or £0.20	2										
5.												
	Hundred thousands Hundredths or 100,000s and 0.01s	2	1 mark for one correct.									
6.												
	DXXXII	1										
7.												
	<table border="1"> <thead> <tr> <th></th> <th>Has 6 or more vertices</th> <th>Has less than 6 vertices</th> </tr> </thead> <tbody> <tr> <th>Has at least one curved face</th> <td></td> <td>A</td> </tr> <tr> <th>Has no curved faces</th> <td>B D</td> <td>C</td> </tr> </tbody> </table>		Has 6 or more vertices	Has less than 6 vertices	Has at least one curved face		A	Has no curved faces	B D	C	2	1 mark for 3 correct and no more than 1 incorrect
	Has 6 or more vertices	Has less than 6 vertices										
Has at least one curved face		A										
Has no curved faces	B D	C										
8.												

question	answer	marks	notes
9.			
	56°	1	
10.			
	0.725kg or 725g	1	
11.			
a	19°C and -7°C	1	1 mark for correct calculation from incorrect temperature readings
b	26°C	1	
12.			
a	10 x 4 rectangle	1	1 mark is awarded for any explanation that shows why the area is not twice the original area.
b	The area is 4x the area of the original.	1	
13.			
	$ \begin{array}{r} 246 \\ 37 \overline{) 9102} \\ \underline{74} \\ 170 \\ \underline{148} \\ 222 \\ \underline{222} \\ 000 \end{array} $	2	1 mark for 9 and 1 mark for 0's
14.			
	1.98 litres	1	Do not accept 1980 ml or 1 litre 980 ml
15.			
a	2040	1	
b	38 minutes	1	
c	5 mins (Coxhoe, Police Station to Bowburn, Garage)	1	
16.			

question	answer	marks	notes
16.			
	61.875		1 mark for incorrect answer, but only 1 mistake in calculation.
17.			
	609 217	1	
18.			
	520-600	1	
19.			
	(-4, 1) and (5, -2) or (-3, 1) and (4, -2) or (-2, 1) and (3, -2) or (-1, 1) and (2, -2)	2	2 marks for both correct answers. Allow any answer where the x coordinates of A and C add to 1 and the y coordinates add to -1. 1 mark for having correct x coordinates or y coordinates.
20.			
	267 pencils	3	3 marks for correct answer rounded to 267. 2 marks for correct calculation but answer not rounded (267.428571) 1 mark for incorrect answer but correct calculation with 1 error. $(26 \times 12 \times 12) / 14$
		Total 35	