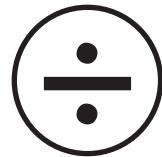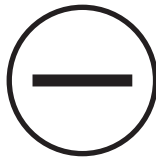## Key Stage 2

Mathematics
Reasoning: Pack 1 Test 1a

Name	
Date	

+ − × ÷

35
total marks

Name: Date:
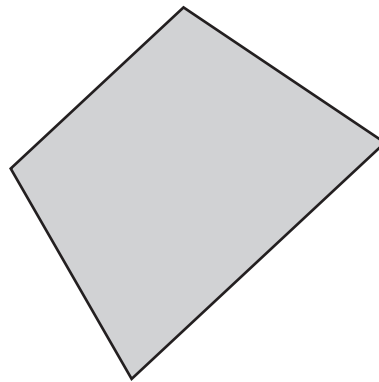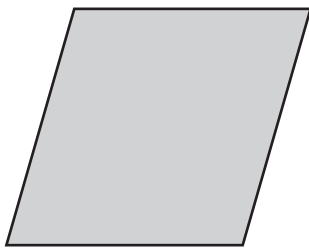
Key Stage 2 Maths Reasoning: Pack 1 Test 1a

1. Order the following numbers from smallest to largest: 426, 412, 462, 416, 402

smallest   largest

2. Draw all the lines of symmetry on these quadrilaterals.

3. Draw lines to match the following calculations to the correct answers.

56 x 0

           56
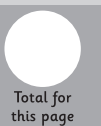
56 ÷ 1

           0

56 x 1

4. Write the decimal equivalents to match the following fractions.

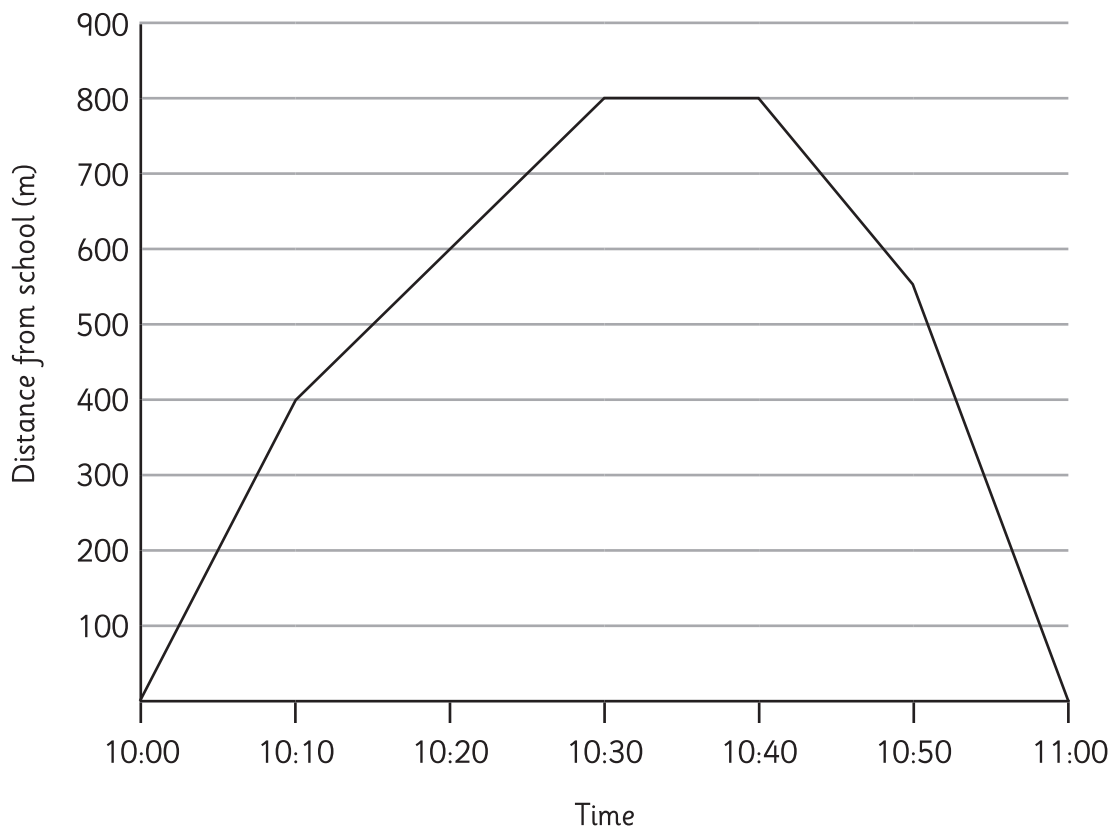$\frac{1}{4}$ = [   ]

$\frac{1}{2}$ = [   ]

$\frac{3}{4}$ = [   ]

5. Children in a class walk around their local area. The graph shows how far they had travelled from school during the visit.

a) How far were the children from their school at 10:20?

b) For how long are the children more than 500m from school?

6.

a) Accurately measure these 2 lines.

_____

_____

b) Write the difference in size between the 2 lines.

1 mark

1 mark

1 mark

1 mark

Total for this page

7. Continue the following sequence:

0.006,   0.012,   0.018, ⬚ , ⬚ , ⬚

8. A shop sells T shirts and shorts for the following prices:

£3.25   £4.99

A mother buys 3 T-shirts and a pair of shorts for her son. She pays with a £10 and a £5 note. With what coins could she be given change?

9. Complete this subtraction calculation:

```
    6  0  1  2
-  ⬚  2  ⬚  4
_____
    2  7  3  8
```

10. James has to be home by 4.30pm. He is 35 minutes late. Write the time he arrives home in 24 hour time.

11. The number p is 20 more than the number q.

Using algebra, write the relationship between p and q.

12. Write all the factors of 24:

13. Use the following line to draw an angle of 34° at point A.

Use a ruler and a protractor of angle measurer.

A ———————————————————— B

14. A teacher needs 70 lengths of string cut to 40 cm each. If balls of string are 10 m long, how many balls will be needed.

15. Two numbers have a difference of 0.7 and a sum of 1. What are the numbers?
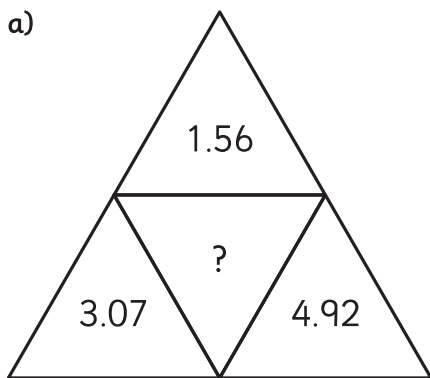
16. Circle the nets which will make a triangular prism.
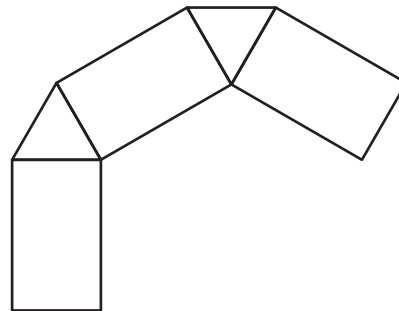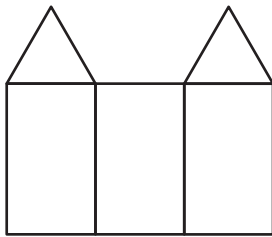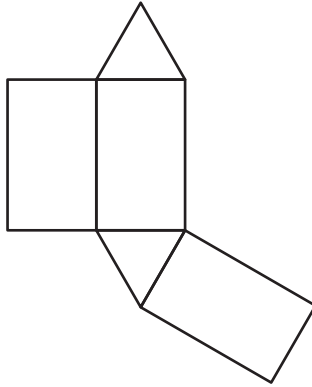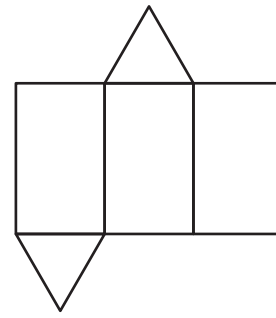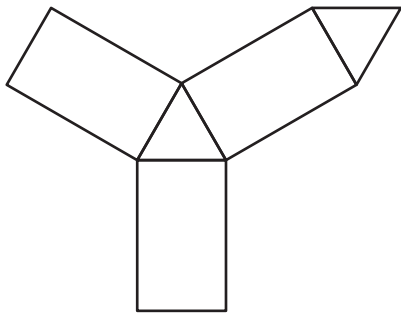
17. Complete the triangles so that the number in the centre is the sum of the numbers on the outside.

a)

1.56

?

3.07   4.92

b)

0.13

6.02

?   ?

18. Here is a shaded shape on a grid.

The shape is translated so that point A moves to point B.

Draw the shape in its new position.

19. Round the number 347 500 to the nearest 1000; 10 000 and 100 000.
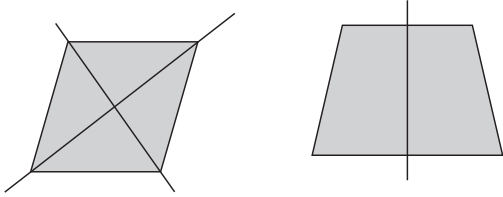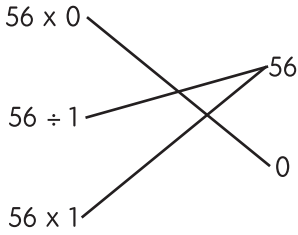
To the nearest 1000

To the nearest 10 000

To the nearest 100 000

20. Write down 3 numbers where the following are true:

The total of the 3 numbers is 20.

The product of the 3 numbers is 90.

21. Here are the ingredients for raspberry ripple ice cream.
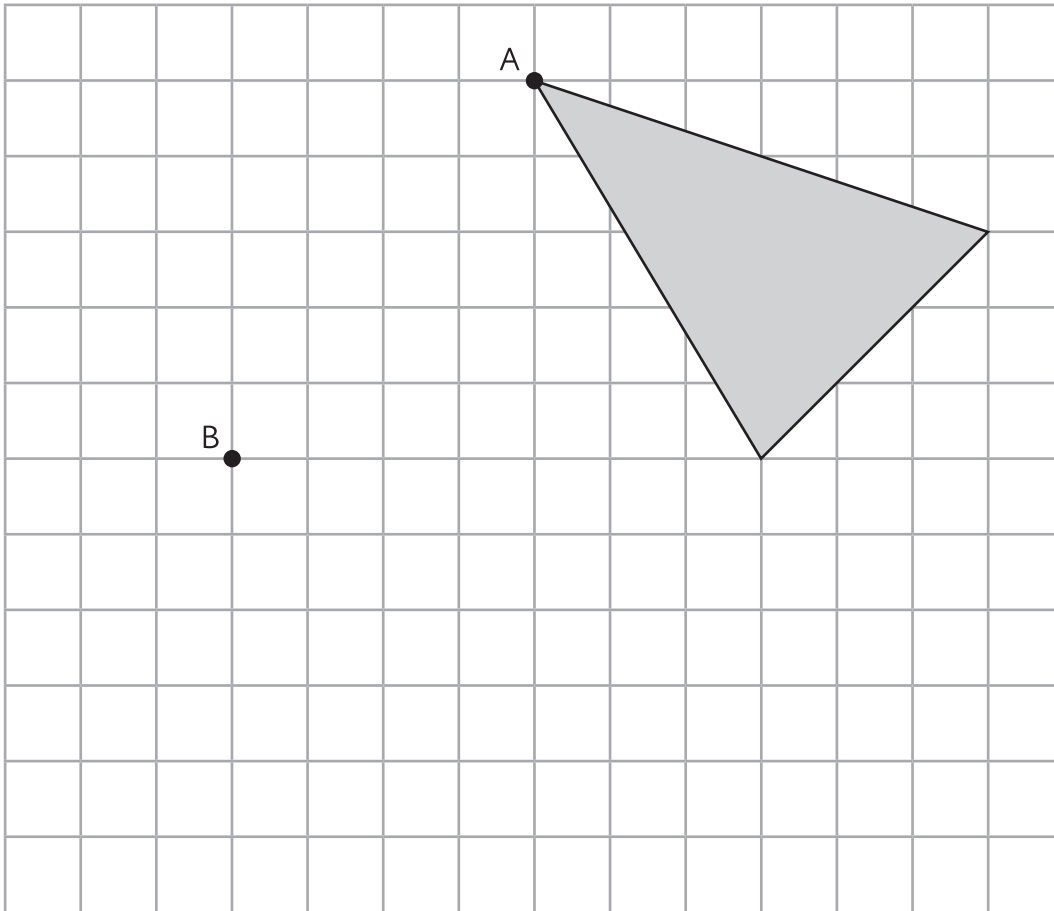
250g raspberries
225g caster sugar
2 large eggs
4 large egg yolks
600ml double cream

A mother has 5 litres of cream to make ice cream for a party. Sugar comes in 1 kg bags. How many bags of sugar will be needed?

question	answer	marks	notes
1.			
	402, 412, 416, 426, 462	1	
2.			
		2	
3.			
		1	1 mark for all correct.
4.			
	0.25 0.5 0.75	1	
5.			
a	600m	1	
b	Answers between 36 and 39 minutes inclusive.	1	.
6.			
a	10.3 cm or 103 mm 4.6 cm or 46 mm	1	Allow 1mm error on each.
b	5.7cm or 57 mm	1	Allow correct calculation based on incorrect answers to 6a.
7.			
	0.024, 0.03, 0.036	1	Allow 0.030.

question	answer	marks	notes
8.			
	Any combination of coins to make 26p	2	2 marks for correct answer 1 mark for correctly calculating the change as 26p but incorrect coins. 1 mark for 1 error in calculation but gives answer using the least coins for that amount.
9.			
	6**01**2 **3**2**7**4 2738	2	1 mark per digit
10.			
	1705	1	
11.			
	p = q + 20 or q = p − 20	2	1 mark for an incorrect expression that uses p, q, 20, = and either + or -. e.g. q = p + 20
12.			
	1, 2, 3, 4, 6, 8, 12, 24	1	
13.			
	Allow 32° - 36° (See end of answers for an accurate answer of the angle)	2	
14.			
	3 balls	2	(40 cm x 70 = 2 800 cm = 28 m) 3 balls = 30 m 1 mark for incorrect answer due to one error of calculation.
15.			
	0.85 and 0.15	2	2 marks for both numbers correct. 1 mark for correct method but 1 calculation mistake.

question	answer	marks	notes
16.			
		2	2 marks for 3 correct. 1 mark for 2 correct and none incorrect.
17.			
a	9.55	1	
b	2 numbers that add up to 5.89	1	
18.			
		2	2 marks for correct answer. 1 mark if triangle's corners are at B and one other correctly placed.
19.			
	348 000 350 000 300 000	2	2 marks for all correct. 1 mark for 2 correct.
20.			
	2, 3 and 15 or 1, 9 and 10	2	2 marks for a correct answer. 1 mark for a set of numbers that correctly meets 1 criteria.

question	answer	marks	notes
21.			
	2 bags	2	2 marks for correct answer. 1 mark for incorrect answer where it is calculated that 8 1/3 times the recipe is required.
		Total 35	