Maths Paper A

1.	13
2.	2
3.	E
4.	$21m^2$
5.	4
6.	$^1/_8$
7.	D
8.	17°C
9.	51
10.	C
11.	B
12.	5
13.	0.7kg
14.	D
15.	C
16.	0.049
17.	£5.65
18.	22m
19.	60%
20.	C
21.	C
22.	60
23.	198
24.	D
25.	£3
26.	B
27.	13
28.	C
29.	Friday
30.	SW
31.	$^1/_6$
32.	3
33.	60p
34.	$^3/_4$
35.	159°
36.	16
37.	11:27
38.	88
39.	$33m^2$
40.	3
41.	D
42.	1 : 200
43.	5
44.	$^2/_6$
45.	15m
46.	5.674
47.	3,434
48.	644
49.	£57.66
50.	11 mins

Maths Paper B

1.	26.5 litres
2.	2
3.	0.81kg
4.	$36m^2$
5.	D
6.	8
7.	C
8.	621.74
9.	72
10.	E
11.	11:10
12.	B
13.	23
14.	27
15.	A
16.	15
17.	15
18.	49p
19.	C
20.	$816cm^3$
21.	72
22.	D
23.	9
24.	8
25.	D
26.	$^4/_9$
27.	x + 18
28.	39
29.	A
30.	S
31.	C
32.	B
33.	$^1/_5$
34.	225°
35.	D
36.	B
37.	£15
38.	$176m^2$
39.	91
40.	E
41.	£1.44
42.	90km
43.	£36
44.	C
45.	£7.90
46.	$80cm^3$
47.	Apples
48.	15m
49.	C
50.	2:15pm

Maths Paper C

1.	129
2.	A
3.	3
4.	$96cm^2$
5.	D
6.	8
7.	C
8.	D
9.	10
10.	5
11.	6
12.	46°C
13.	$^1/_6$
14.	12
15.	1219
16.	3.7m
17.	2:10pm
18.	1 : 400
19.	2
20.	6
21.	$120cm^2$
22.	$^3/_5$
23.	7.79
24.	3
25.	137.5cm
26.	£2.29
27.	77
28.	C
29.	E
30.	1000g
31.	$34m^2$
32.	£44.66
33.	360miles
34.	£4.15
35.	D
36.	(6, 3)
37.	$^3/_7$
38.	300
39.	$^1/_7$
40.	13
41.	D
42.	£13.80
43.	D
44.	D
45.	1.25 litres
46.	(1, 2)
47.	60cm
48.	£1.58
49.	B
50.	33

Maths Paper D

1.	48
2.	B
3.	B
4.	$53m^2$
5.	3°C
6.	25%
7.	D
8.	2.05
9.	B
10.	3 : 2
11.	259
12.	D
13.	3.9
14.	3,827
15.	D
16.	C
17.	18
18.	0.24m
19.	£56.48
20.	1.85 litres
21.	$^1/_3$
22.	E
23.	20km
24.	D
25.	71°
26.	1051
27.	26
28.	y - 19
29.	$^7/_{12}$
30.	284
31.	C
32.	E
33.	3.98kg
34.	A
35.	C
36.	5
37.	15
38.	5
39.	B
40.	$^1/_3$
41.	7
42.	$^5/_7$
43.	270°
44.	C
45.	£323
46.	$^5/_6$
47.	526.60
48.	B
49.	87
50.	(5, 4)

Maths Paper A

1.	13
2.	2
3.	E
4.	$21m^2$
5.	4
6.	$^1/_8$
7.	D
8.	17°C
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10.	C
11.	B
12.	5
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21.	C
22.	60
23.	198
24.	D
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26.	B
27.	13
28.	C
29.	Friday
30.	SW
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33.	60p
34.	$^3/_4$
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36.	16
37.	11:27
38.	88
39.	$33m^2$
40.	3
41.	D
42.	1 : 200
43.	5
44.	$^2/_6$
45.	15m
46.	5.674
47.	3,434
48.	644
49.	£57.66
50.	11 mins

Maths Paper B

1.	26.5 litres
2.	2
3.	0.81kg
4.	$36m^2$
5.	D
6.	8
7.	C
8.	621.74
9.	72
10.	E
11.	11:10
12.	B
13.	23
14.	27
15.	A
16.	15
17.	15
18.	49p
19.	C
20.	$816cm^3$
21.	72
22.	D
23.	9
24.	8
25.	D
26.	$^4/_9$
27.	x + 18
28.	39
29.	A
30.	S
31.	C
32.	B
33.	$^1/_5$
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43.	£36
44.	C
45.	£7.90
46.	$80cm^3$
47.	Apples
48.	15m
49.	C
50.	2:15pm

Maths Paper C

1.	129
2.	A
3.	3
4.	$96cm^2$
5.	D
6.	8
7.	C
8.	D
9.	10
10.	5
11.	6
12.	46°C
13.	$^1/_6$
14.	12
15.	1219
16.	3.7m
17.	2:10pm
18.	1 : 400
19.	2
20.	6
21.	$120cm^2$
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23.	7.79
24.	3
25.	137.5cm
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28.	C
29.	E
30.	1000g
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32.	£44.66
33.	360miles
34.	£4.15
35.	D
36.	(6, 3)
37.	$^3/_7$
38.	300
39.	$^1/_7$
40.	13
41.	D
42.	£13.80
43.	D
44.	D
45.	1.25 litres
46.	(1, 2)
47.	60cm
48.	£1.58
49.	B
50.	33

Maths Paper D

1.	48
2.	B
3.	B
4.	$53m^2$
5.	3°C
6.	25%
7.	D
8.	2.05
9.	B
10.	3 : 2
11.	259
12.	D
13.	3.9
14.	3,827
15.	D
16.	C
17.	18
18.	0.24m
19.	£56.48
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24.	D
25.	71°
26.	1051
27.	26
28.	y - 19
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31.	C
32.	E
33.	3.98kg
34.	A
35.	C
36.	5
37.	15
38.	5
39.	B
40.	$^1/_3$
41.	7
42.	$^5/_7$
43.	270°
44.	C
45.	£323
46.	$^5/_6$
47.	526.60
48.	B
49.	87
50.	(5, 4)

MATHS
PAPER B

Please read the following before you start the test -

1. Do not begin the test until you are told to do so.
2. This is a multiple choice test so you need to mark your answers on the separate answer sheets, not in this booklet.
3. Mark your answers clearly on the answer sheets using a pencil. In the column that has the same number as the question, draw a firm line clearly through the rectangle next to your answer. Do not cross out any answers – if you want to change an answer, rub it out completely and put in your new answer. Make sure that you keep your place on the answer sheet.
4. Try and answer as many questions as you can. If you cannot answer a question, do not waste time on it but go on to the next question. If you are unsure of an answer, choose the one which you think is best.
5. You can do any rough working out in this booklet.
6. Work as quickly and as carefully as you can.
7. You will have 50 minutes to complete the test.

1. A tank contains 35 litres of water.

   Sophia puts 500ml of water into 17 bottles.

   How much water is left in the tank?

2. How many of the letters in this word have reflective and rotational symmetry?

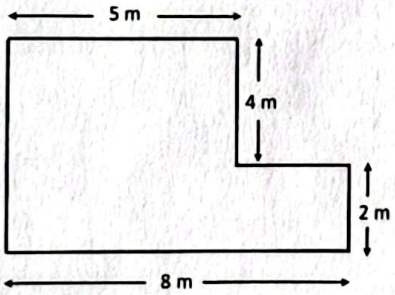
NOISE

3. Mia makes some cakes for the school Summer Fair.

   The cakes weigh:-

   1.35 kg
   2.05 kg
   1.64 kg
   1.24 kg
   1.82 kg

   What is the range?

4. 

   A farmer is ploughing his field which has the above dimensions.

   What is the area of the field?

5. Oranges cost 50p each.
   Peaches cost 37p each.
   Apples cost 29p each.

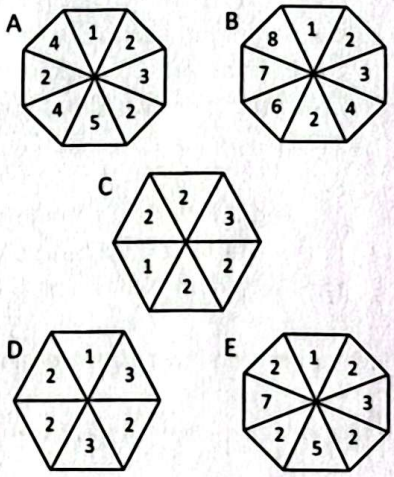
   Which of the following costs £2.24?

   A 1 orange, 2 peaches, 2 apples
   B 2 oranges, 4 peaches
   C 3 peaches, 5 apples
   D 2 oranges, 1 peach, 3 apples
   E 3 oranges, 2 peaches, 1 apple

6. 24 48 12 36 60

   Which of the numbers below is NOT a factor of all of the above numbers?

   2
   3
   4
   8
   12

7. 

   John has five spinners.

   If he spins all of the spinners, with which spinner is he most likely to get a 2?

8. What is this number to two decimal places?

621.7362

Continue to the next page

9. Charlotte is organising a street party.

She has a 1.5 litre bottle of blackcurrant squash which she dilutes with five times as much water.

How many 125ml cups can be filled with the diluted blackcurrant juice?

10. Which quadrilateral has two pairs of adjacent equal sides and one pair of opposite equal angles?

A square
B rhombus
C isosceles triangle
D parallelogram
E kite

11. The following is a timetable for buses between Ripon and Leeds.

Ripon	09:10	11:10	13:10	15:10	17:10
Ripley		11:29		15:29	17:29
Harrogate	09:40	11:43	13:40	15:43	17:43
Pannal	10:07	12:10	14:07		18:10
Harewood	10:19	12:22	14:19	16:17	18:22
Alwoodley	10:29	12:32	14:29	16:27	18:32
Leeds	10:47	12:50	14:47	16:45	18:50

Tom lives in Ripley and needs to be in Alwoodley by 3:00pm. What time does the bus he needs to catch leave Ripon?

12. Which of these lengths is the smallest?

A 53,000 cm
B 50,030 cm
C 5,030 m
D 530,000 mm
E 5.03 km

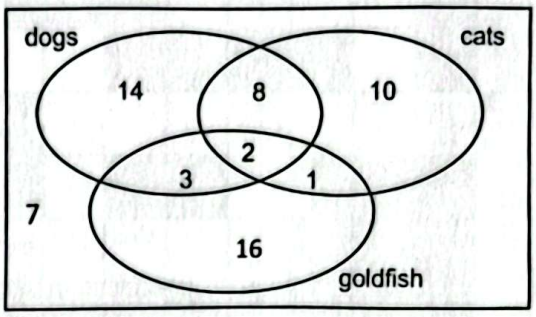
13. Five sisters have a mean age of 21.

Jade is 21, Misha is 24, Amy is 18 and Catriona is 19.

How old is the other sister?

14. Below is a Venn diagram which shows the different pets of the children in Year 3.

Pets of children in Year 3

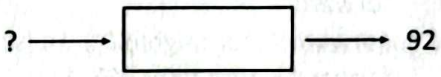


How many children in Year 3 had dogs as pets?

15. $(63 \times 853) + (37 \times 853) =$

A 85,300
B 83,740
C 9,521
D 7,624,535
E 254,326

16. This machine multiplies a number by 7 and then subtracts 13.



What number has been put into the machine?

17. If $y + 6 = 2y - 9$,

what is the value of y ?

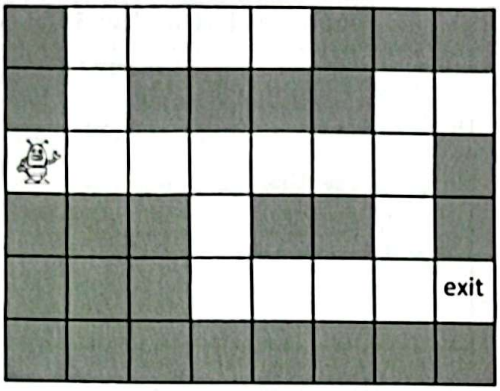
18. Maria buys six oranges.

She pays for them with a £20 note and gets £17.06 change.

How much does one orange cost?

Continue to the next page

19. A robot is programmed to make its way through the maze to the exit.



Which of the following is the correct programme?

A Forward 1, turn right 90°, forward 2, turn left 90°, forward 4.

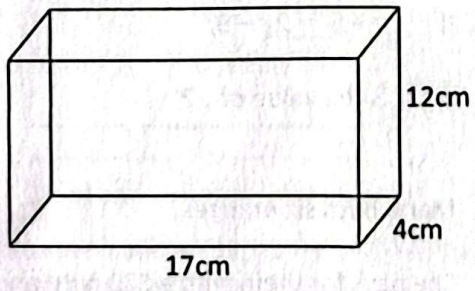
B Forward 1, turn left 90°, forward 2, turn right 90°, forward 3.

C Forward 3, turn right 90°, forward 2, turn left 90°, forward 4.

D Forward 3, turn right 90°, forward 2, turn right 90°, forward 4.

E Forward 4, turn right 90°, forward 2, turn right 90°, forward 4.

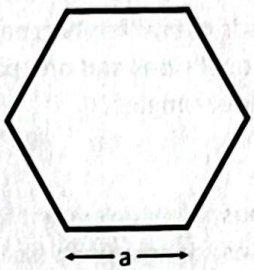
20. What is the volume of this cuboid?



21. On an exam paper, there were 120 questions. The average percentage was 60%.

What was the average mark?

22. What is the perimeter of this regular hexagon?



A a + 6
B a + a
C ab
D 6a
E a(a)

23. Joseph counted the number of stickers he had from different countries.

He had 12 from America, 6 from Turkey, 4 from China, 8 from Russia, 16 from England and 10 from Mexico.

What was the median number of stickers?

24. An international football tournament was being held in St George in America.

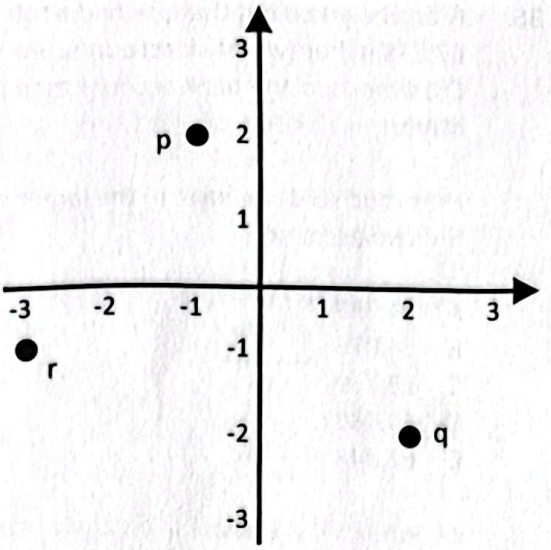
At the Sports Village each accommodation unit houses 66 people.

The North West of England decided to send teams to take part in the tournament. In total 339 children and 153 adults attended the competition.

How many accommodation units did the North West teams have to book?

Continue to the next page

25.



What are the coordinates of points p, q and r ?

	p	q	r
A	(1, 2)	(-2, -2)	(-3, -1)
B	(-1, 2)	(2, -2)	(3, -1)
C	(-1, -2)	(2, -2)	(-3, -1)
D	(-1, 2)	(2, -2)	(-3, -1)
E	(-1, 2)	(-2, -2)	(-1, -3)

26. Which of these is the smallest?

0.473 $^{4}/_{9}$ 0.51 $^{4}/_{7}$ 45.6%

27. Helena's pony was x years old 11 years ago.

How old will her pony be in 7 years time?

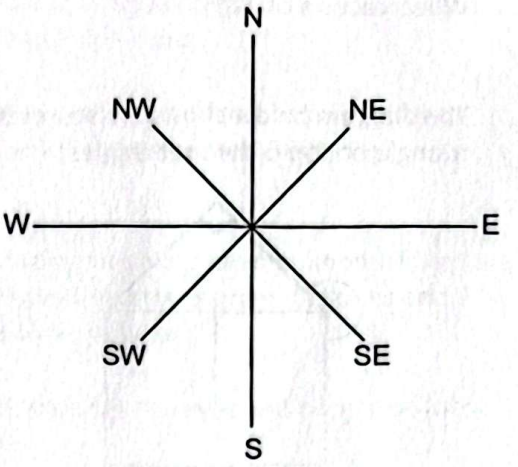
28. Which of these numbers is not a prime number?

2 13 39 53 79

29. Which of the following numbers is closest in value to 9?

A 8.996
B 9.02
C 8.99
D 9.098
E 9.1

30.



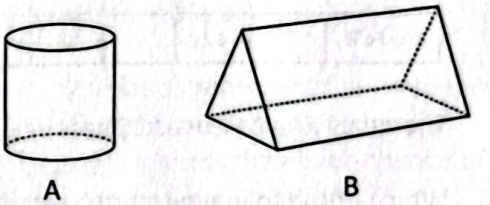
Emily is facing North East.
She turns 135° clockwise.

Which direction is Emily now facing?

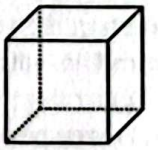
31. Which one of these is the largest?

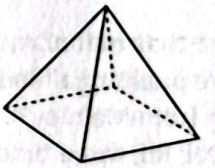
A $^{1}/_{3}$ of 24
B 25% of 32
C $^{2}/_{3}$ of 15
D 75% of 12
E $^{1}/_{2}$ of 18

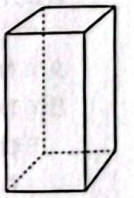
32. Which shape has got 5 faces, 9 edges and 6 vertices?


A

B


C

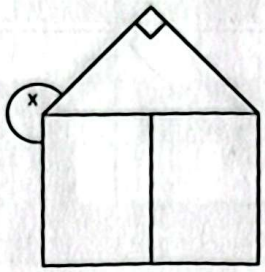

D


E

Continue to the next page

33. What fraction of 4kg is 800g?

34. The diagram below shows an isosceles triangle on top of two rectangles.



What is the size of the angle labelled x?

35. Six local schools were choosing children from Year 6 to run the 100m in the County Trials.

The chart below shows the results of the children in time bands from the qualifying races.

Time	(in secs)				
	20-25	26-30	31-35	36-40	41-45
St Peter's	3	10	9	6	3
Moorfield	4	6	10	3	6
Ashgreen	2	8	5	3	3
Mainley	1	17	9	4	2
Oak Road	3	5	12	5	4
The Fells	5	12	0	0	0

The qualifying time was 30 secs or under.

Which of the following statements is true?

A More than half of Ashgreen qualified
B More pupils qualified from The Fells than from Mainley
C At Oak Rd, three times as many pupils didn't qualify than did qualify
D The same number of children qualified from Moorfield and Ashgreen
E At St Peter's, 32 children took part in the qualifying race

36. Niamh worked out that she had a total of £7,538 in her two bank accounts. She had £614 more in one bank account than the other.

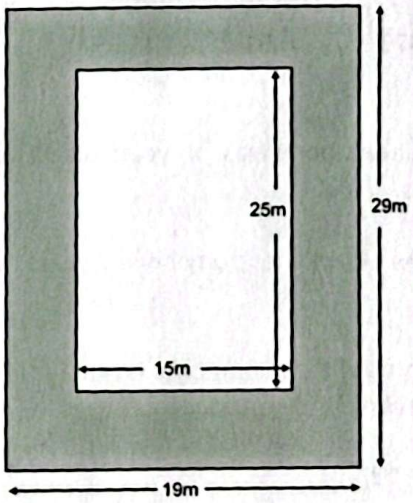
How much did she have in the larger of the two accounts?

A £4,383
B £4,076
C £3,769
D £3,462
E £2,848

37. Cerys had saved £12 and earned £6 for washing her grandad's car. On her birthday she received £10 pounds from her aunty. She then borrowed some money from her dad to buy a necklace which cost £43.

How much money did she owe her dad?

38. Farmer Jones decided to create a wildlife nature reserve (shaded grey) around one of his fields.



What is the area of the nature reserve?

39. The sum of the first four square numbers is 30.

What is the sum of the first six square numbers?

Continue to the next page

40. Adam leaves to go swimming at quarter to four.

How would this be written on a digital clock?

A 15:15

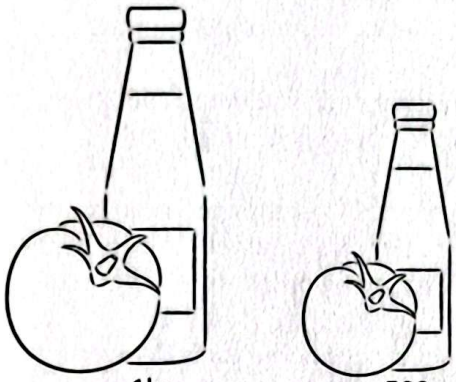
B 16:15

C 04:45

D 16:45

E 15:45

41. Mrs Wriggler is holding a barbeque for the cub pack. She needs to buy 3kg of tomato ketchup.



1kg 500g

A 1 kg bottle costs £1.30 and a 500g bottle costs £0.89.

How much would she save if she bought the large bottles rather than the small bottles?

42. A map of Turkey is drawn to a scale of 1 : 600,000.

On the map, the distance between two towns is 15cm.

What is the distance between the towns in real life?

43. A 4 litre tin of paint costs £12 and covers 24m² of fencing.

How much will it cost to paint a fence which is 2m high and 36m long?

44. Maisie has a bunch of balloons. There are 5 red balloons, 3 green balloons and 8 yellow balloons.

She closes her eyes and pops a balloon.

In which of the following must both statements be true?

A She has a less than even chance of popping a red balloon.
She has a greater than even chance of popping a yellow balloon.

B She has an even chance of popping a yellow balloon.
She has a greater than even chance of popping a red balloon.

C She has a less than even chance of popping a green balloon.
She has an even chance of popping a yellow balloon.

D She has a less than even chance of popping a red balloon.
She has an even chance of popping a green balloon.

E She has a greater than even chance of popping a yellow balloon.
She has a less than even chance of popping a green balloon.

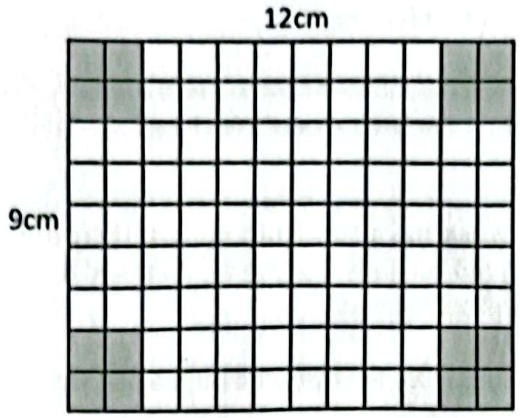
45. Thomas buys a computer game in the sales at his favourite shop. In the sale, there is 35% off all computer games.

The full price of the game is £34.00.

How much change does Thomas get from £30.00?

Continue to the next page

46.

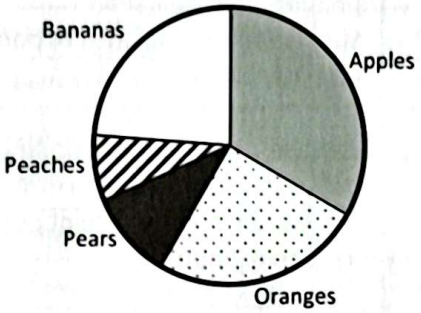


With the shaded corners removed, this net can be folded into an open box.

What is the capacity of the box?

47. Jamie was trying to eat more healthily so he decided to keep a record of how many pieces of fruit he ate in one week.

He drew a pie chart to show the numbers of each type of fruit he ate.



What was the mode of the different types of fruit?

48. A model spaceship has a scale of 1 : 300.

If the cockpit of the model is 5cm wide, how wide is the cockpit on the real spaceship?

49. Harry went with his mum to the Garden Centre to buy some plants.

They bought 15 trays of pansies at £x each and 12 trays of primulas at £y each.

How much did the plants cost altogether?

A £ 27(x + y)
B £ 15 + x + 12 + y
C £ 15x + 12y
D £ 27 + x + y
E £ 15x - 12y

50. Rachel, Vicky and Georgina went on a shopping trip. They left home at 9:15am and the journey took 20 minutes.

They shopped for 2 hours and 30 minutes before stopping for lunch.

45 minutes later they returned to the shops but only shopped for another hour before setting off home.

If the journey home took 25 minutes, at what time did they get home?

END OF TEST

Maths Paper B

Pupil's Name	Date of Test
School Name	DATE OF BIRTH

PUPIL NUMBER						SCHOOL NUMBER						DATE OF BIRTH				
												Day		Month		Year
[0]	[0]	[0]	[0]	[0]	[0]	[0]	[0]	[0]	[0]	[0]	[0]	[0]	[0]	January ☐		2004 ☐
[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	February ☐		2005 ☐
[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	March ☐		2006 ☐
[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	April ☐		2007 ☐
[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]		[4]	May ☐		2008 ☐
[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]		[5]	June ☐		2009 ☐
[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]		[6]	July ☐		2010 ☐
[7]	[7]	[7]	[7]	[7]	[7]	[7]	[7]	[7]	[7]	[7]	[7]		[7]	August ☐		2011 ☐
[8]	[8]	[8]	[8]	[8]	[8]	[8]	[8]	[8]	[8]	[8]	[8]		[8]	September ☐		2012 ☐
[9]	[9]	[9]	[9]	[9]	[9]	[9]	[9]	[9]	[9]	[9]	[9]		[9]	October ☐		2013 ☐
														November ☐		2014 ☐
														December ☐		2015 ☐

1	2	3	4	5	6	7	8	9
25.5ℓ ☐	1 ☐	1.74kg ☐	26m² ☐	A ☐	2 ☐	A ☐	622.73 ☐	12 ☐
26ℓ ☐	2 ☐	1.64kg ☐	29m² ☐	B ☐	3 ☐	B ☐	621.74 ☐	30 ☐
26.5ℓ ☐	3 ☐	1.21kg ☐	32m² ☐	C ☐	4 ☐	C ☐	621.73 ☐	36 ☐
32ℓ ☐	4 ☐	0.81kg ☐	36m² ☐	D ☐	8 ☐	D ☐	621.8 ☐	60 ☐
32.5ℓ ☐	5 ☐	0.69kg ☐	38m² ☐	E ☐	12 ☐	E ☐	622 ☐	72 ☐

10	11	12	13	14	15	16	17	18
A ☐	09:10 ☐	A ☐	23 ☐	14 ☐	A ☐	11 ☐	15 ☐	39p ☐
B ☐	11:10 ☐	B ☐	22 ☐	17 ☐	B ☐	12 ☐	16 ☐	45p ☐
C ☐	13:10 ☐	C ☐	21 ☐	25 ☐	C ☐	13 ☐	17 ☐	49p ☐
D ☐	15:10 ☐	D ☐	20 ☐	27 ☐	D ☐	14 ☐	18 ☐	52p ☐
E ☐	17:10 ☐	E ☐	19 ☐	54 ☐	E ☐	15 ☐	19 ☐	76p ☐

19	20	21	22	23	24	25	26	27
A ☐	33cm³ ☐	48 ☐	A ☐	6 ☐	5 ☐	A ☐	0.473 ☐	x + 4 ☐
B ☐	66cm³ ☐	60 ☐	B ☐	7 ☐	6 ☐	B ☐	$^4/_9$ ☐	x - 4 ☐
C ☐	204m³ ☐	64 ☐	C ☐	8 ☐	8 ☐	C ☐	0.51 ☐	x - 7 ☐
D ☐	816cm³ ☐	70 ☐	D ☐	9 ☐	9 ☐	D ☐	$^4/_7$ ☐	x + 18 ☐
E ☐	816m³ ☐	72 ☐	E ☐	10 ☐	11 ☐	E ☐	45.6% ☐	x - 18 ☐

28	29	30	31	32	33	34	35	36
2 ☐	A ☐	W ☐	A ☐	A ☐	$^1/_{20}$ ☐	270° ☐	A ☐	A ☐
13 ☐	B ☐	S ☐	B ☐	B ☐	$^2/_{20}$ ☐	245° ☐	B ☐	B ☐
39 ☐	C ☐	SE ☐	C ☐	C ☐	$^1/_{10}$ ☐	240° ☐	C ☐	C ☐
53 ☐	D ☐	NW ☐	D ☐	D ☐	$^1/_5$ ☐	235° ☐	D ☐	D ☐
79 ☐	E ☐	SW ☐	E ☐	E ☐	$^4/_{10}$ ☐	225° ☐	E ☐	E ☐

37	38	39	40	41	42	43	44	45
£15 ☐	176m² ☐	49 ☐	A ☐	£1.04 ☐	90cm ☐	£12 ☐	A ☐	£11.90 ☐
-£15 ☐	184m² ☐	55 ☐	B ☐	£1.18 ☐	30km ☐	£36 ☐	B ☐	£22.10 ☐
£25 ☐	202m² ☐	64 ☐	C ☐	£1.22 ☐	90km ☐	£120 ☐	C ☐	£7.90 ☐
-£25 ☐	246m² ☐	81 ☐	D ☐	£1.44 ☐	65km ☐	£180 ☐	D ☐	£15.90 ☐
£28 ☐	263m² ☐	91 ☐	E ☐	£1.48 ☐	900km ☐	£216 ☐	E ☐	£20.10 ☐

46	47	48	49	50
80cm³ ☐	Bananas ☐	5cm ☐	A ☐	1:50pm ☐
96cm² ☐	Apples ☐	5m ☐	B ☐	2:15pm ☐
42cm² ☐	Peaches ☐	15m ☐	C ☐	2:00am ☐
80cm² ☐	Pears ☐	150cm ☐	D ☐	2:30pm ☐
96cm³ ☐	Oranges ☐	300cm ☐	E ☐	2:00pm ☐

MATHS
PAPER B

Please read the following before you start the test -

1. Do not begin the test until you are told to do so.
2. This is a multiple choice test so you need to mark your answers on the separate answer sheets, not in this booklet.
3. Mark your answers clearly on the answer sheets using a pencil. In the column that has the same number as the question, draw a firm line clearly through the rectangle next to your answer. Do not cross out any answers – if you want to change an answer, rub it out completely and put in your new answer. Make sure that you keep your place on the answer sheet.
4. Try and answer as many questions as you can. If you cannot answer a question, do not waste time on it but go on to the next question. If you are unsure of an answer, choose the one which you think is best.
5. You can do any rough working out in this booklet.
6. Work as quickly and as carefully as you can.
7. You will have 50 minutes to complete the test.

1. A tank contains 35 litres of water.

   Sophia puts 500ml of water into 17 bottles.

   How much water is left in the tank?

2. How many of the letters in this word have reflective and rotational symmetry?

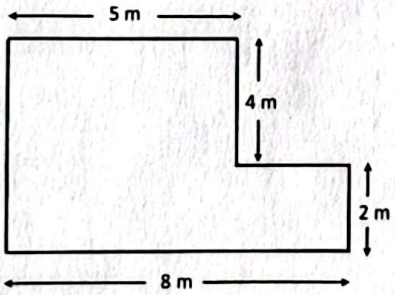
NOISE

3. Mia makes some cakes for the school Summer Fair.

   The cakes weigh:-

   1.35 kg
   2.05 kg
   1.64 kg
   1.24 kg
   1.82 kg

   What is the range?

4. 

   A farmer is ploughing his field which has the above dimensions.

   What is the area of the field?

5. Oranges cost 50p each.
   Peaches cost 37p each.
   Apples cost 29p each.

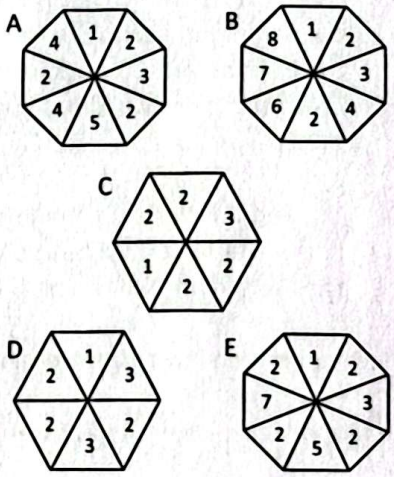
   Which of the following costs £2.24?

   A 1 orange, 2 peaches, 2 apples
   B 2 oranges, 4 peaches
   C 3 peaches, 5 apples
   D 2 oranges, 1 peach, 3 apples
   E 3 oranges, 2 peaches, 1 apple

6. 24 48 12 36 60

   Which of the numbers below is NOT a factor of all of the above numbers?

   2
   3
   4
   8
   12

7. 

   John has five spinners.

   If he spins all of the spinners, with which spinner is he most likely to get a 2?

8. What is this number to two decimal places?

621.7362

Continue to the next page

9. Charlotte is organising a street party.

She has a 1.5 litre bottle of blackcurrant squash which she dilutes with five times as much water.

How many 125ml cups can be filled with the diluted blackcurrant juice?

10. Which quadrilateral has two pairs of adjacent equal sides and one pair of opposite equal angles?

A square
B rhombus
C isosceles triangle
D parallelogram
E kite

11. The following is a timetable for buses between Ripon and Leeds.

Ripon	09:10	11:10	13:10	15:10	17:10
Ripley		11:29		15:29	17:29
Harrogate	09:40	11:43	13:40	15:43	17:43
Pannal	10:07	12:10	14:07		18:10
Harewood	10:19	12:22	14:19	16:17	18:22
Alwoodley	10:29	12:32	14:29	16:27	18:32
Leeds	10:47	12:50	14:47	16:45	18:50

Tom lives in Ripley and needs to be in Alwoodley by 3:00pm. What time does the bus he needs to catch leave Ripon?

12. Which of these lengths is the smallest?

A 53,000 cm
B 50,030 cm
C 5,030 m
D 530,000 mm
E 5.03 km

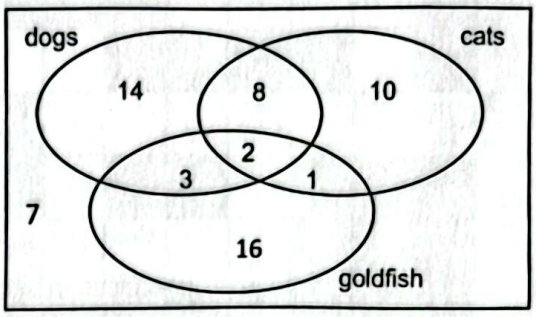
13. Five sisters have a mean age of 21.

Jade is 21, Misha is 24, Amy is 18 and Catriona is 19.

How old is the other sister?

14. Below is a Venn diagram which shows the different pets of the children in Year 3.

Pets of children in Year 3

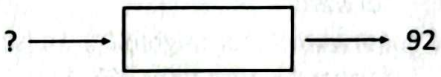


How many children in Year 3 had dogs as pets?

15. $(63 \times 853) + (37 \times 853) =$

A 85,300
B 83,740
C 9,521
D 7,624,535
E 254,326

16. This machine multiplies a number by 7 and then subtracts 13.



What number has been put into the machine?

17. If $y + 6 = 2y - 9$,

what is the value of y ?

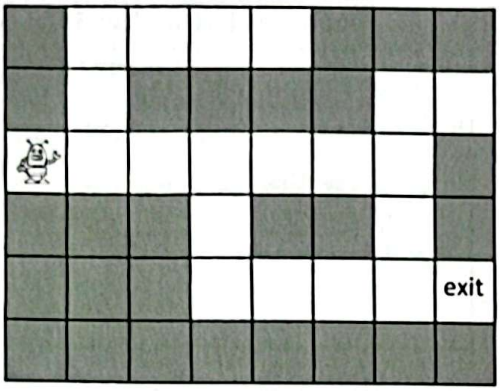
18. Maria buys six oranges.

She pays for them with a £20 note and gets £17.06 change.

How much does one orange cost?

Continue to the next page

19. A robot is programmed to make its way through the maze to the exit.



Which of the following is the correct programme?

A Forward 1, turn right 90°, forward 2, turn left 90°, forward 4.

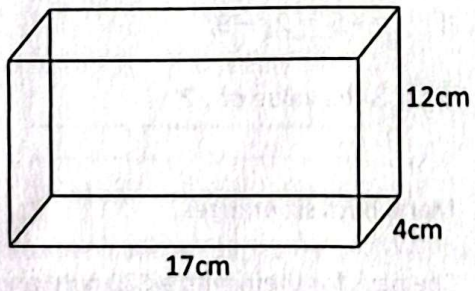
B Forward 1, turn left 90°, forward 2, turn right 90°, forward 3.

C Forward 3, turn right 90°, forward 2, turn left 90°, forward 4.

D Forward 3, turn right 90°, forward 2, turn right 90°, forward 4.

E Forward 4, turn right 90°, forward 2, turn right 90°, forward 4.

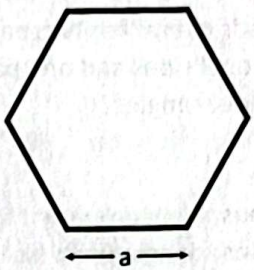
20. What is the volume of this cuboid?



21. On an exam paper, there were 120 questions. The average percentage was 60%.

What was the average mark?

22. What is the perimeter of this regular hexagon?



A a + 6
B a + a
C ab
D 6a
E a(a)

23. Joseph counted the number of stickers he had from different countries.

He had 12 from America, 6 from Turkey, 4 from China, 8 from Russia, 16 from England and 10 from Mexico.

What was the median number of stickers?

24. An international football tournament was being held in St George in America.

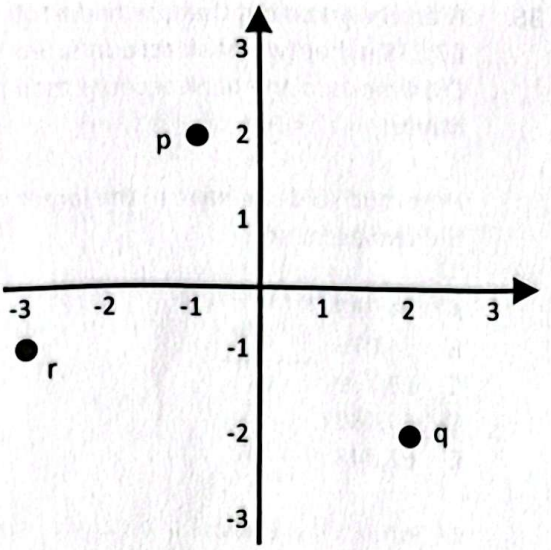
At the Sports Village each accommodation unit houses 66 people.

The North West of England decided to send teams to take part in the tournament. In total 339 children and 153 adults attended the competition.

How many accommodation units did the North West teams have to book?

Continue to the next page

25.



What are the coordinates of points p, q and r ?

	p	q	r
A	(1, 2)	(-2, -2)	(-3, -1)
B	(-1, 2)	(2, -2)	(3, -1)
C	(-1, -2)	(2, -2)	(-3, -1)
D	(-1, 2)	(2, -2)	(-3, -1)
E	(-1, 2)	(-2, -2)	(-1, -3)

26. Which of these is the smallest?

0.473 $^{4}/_{9}$ 0.51 $^{4}/_{7}$ 45.6%

27. Helena's pony was x years old 11 years ago.

How old will her pony be in 7 years time?

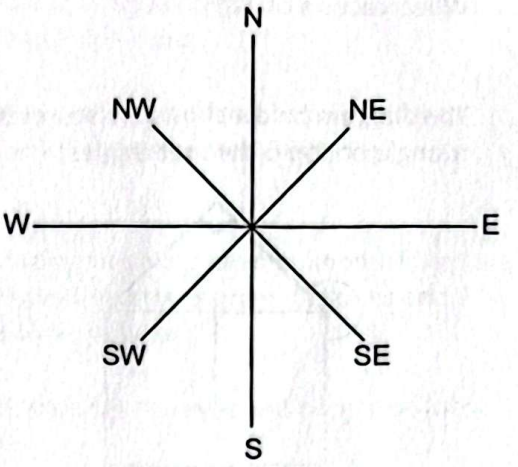
28. Which of these numbers is not a prime number?

2 13 39 53 79

29. Which of the following numbers is closest in value to 9?

A 8.996
B 9.02
C 8.99
D 9.098
E 9.1

30.



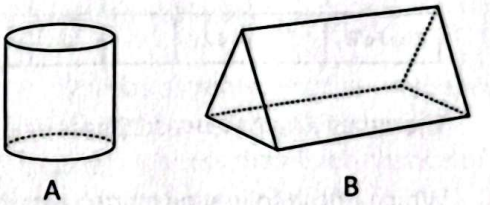
Emily is facing North East.
She turns 135° clockwise.

Which direction is Emily now facing?

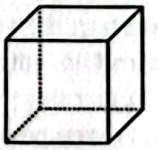
31. Which one of these is the largest?

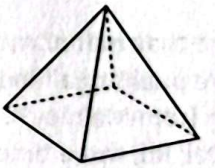
A $^{1}/_{3}$ of 24
B 25% of 32
C $^{2}/_{3}$ of 15
D 75% of 12
E $^{1}/_{2}$ of 18

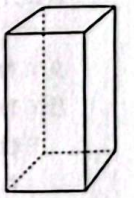
32. Which shape has got 5 faces, 9 edges and 6 vertices?


A

B


C

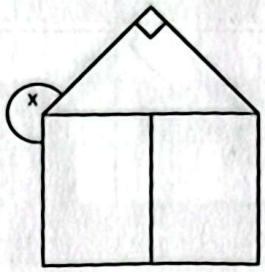

D


E

Continue to the next page

33. What fraction of 4kg is 800g?

34. The diagram below shows an isosceles triangle on top of two rectangles.



What is the size of the angle labelled x?

35. Six local schools were choosing children from Year 6 to run the 100m in the County Trials.

The chart below shows the results of the children in time bands from the qualifying races.

Time	(in secs)				
	20-25	26-30	31-35	36-40	41-45
St Peter's	3	10	9	6	3
Moorfield	4	6	10	3	6
Ashgreen	2	8	5	3	3
Mainley	1	17	9	4	2
Oak Road	3	5	12	5	4
The Fells	5	12	0	0	0

The qualifying time was 30 secs or under.

Which of the following statements is true?

A More than half of Ashgreen qualified
B More pupils qualified from The Fells than from Mainley
C At Oak Rd, three times as many pupils didn't qualify than did qualify
D The same number of children qualified from Moorfield and Ashgreen
E At St Peter's, 32 children took part in the qualifying race

36. Niamh worked out that she had a total of £7,538 in her two bank accounts. She had £614 more in one bank account than the other.

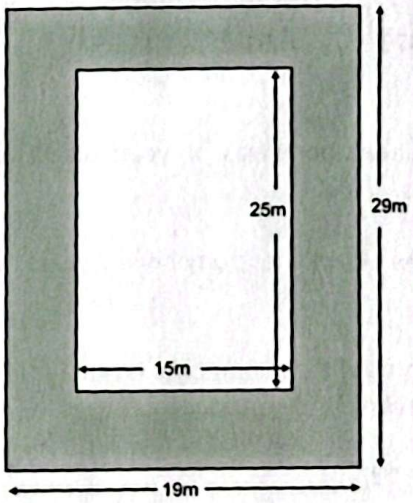
How much did she have in the larger of the two accounts?

A £4,383
B £4,076
C £3,769
D £3,462
E £2,848

37. Cerys had saved £12 and earned £6 for washing her grandad's car. On her birthday she received £10 pounds from her aunty. She then borrowed some money from her dad to buy a necklace which cost £43.

How much money did she owe her dad?

38. Farmer Jones decided to create a wildlife nature reserve (shaded grey) around one of his fields.



What is the area of the nature reserve?

39. The sum of the first four square numbers is 30.

What is the sum of the first six square numbers?

Continue to the next page

40. Adam leaves to go swimming at quarter to four.

How would this be written on a digital clock?

A 15:15

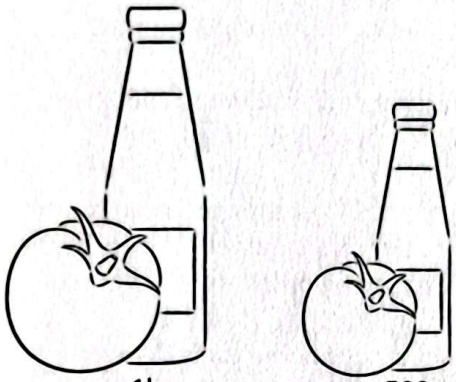
B 16:15

C 04:45

D 16:45

E 15:45

41. Mrs Wriggler is holding a barbeque for the cub pack. She needs to buy 3kg of tomato ketchup.



1kg 500g

A 1 kg bottle costs £1.30 and a 500g bottle costs £0.89.

How much would she save if she bought the large bottles rather than the small bottles?

42. A map of Turkey is drawn to a scale of 1 : 600,000.

On the map, the distance between two towns is 15cm.

What is the distance between the towns in real life?

43. A 4 litre tin of paint costs £12 and covers 24m² of fencing.

How much will it cost to paint a fence which is 2m high and 36m long?

44. Maisie has a bunch of balloons. There are 5 red balloons, 3 green balloons and 8 yellow balloons.

She closes her eyes and pops a balloon.

In which of the following must both statements be true?

A She has a less than even chance of popping a red balloon.
She has a greater than even chance of popping a yellow balloon.

B She has an even chance of popping a yellow balloon.
She has a greater than even chance of popping a red balloon.

C She has a less than even chance of popping a green balloon.
She has an even chance of popping a yellow balloon.

D She has a less than even chance of popping a red balloon.
She has an even chance of popping a green balloon.

E She has a greater than even chance of popping a yellow balloon.
She has a less than even chance of popping a green balloon.

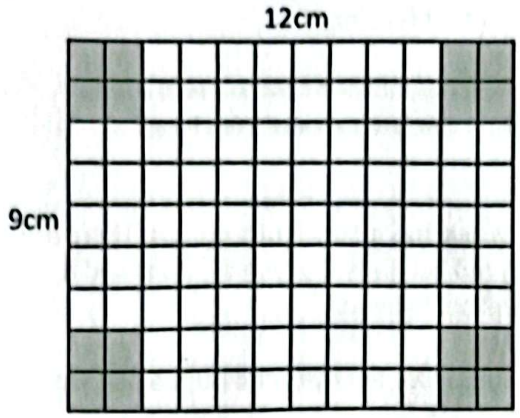
45. Thomas buys a computer game in the sales at his favourite shop. In the sale, there is 35% off all computer games.

The full price of the game is £34.00.

How much change does Thomas get from £30.00?

Continue to the next page

46.

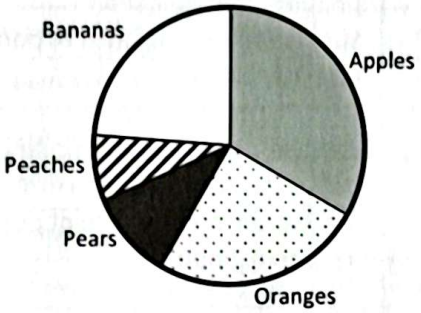


With the shaded corners removed, this net can be folded into an open box.

What is the capacity of the box?

47. Jamie was trying to eat more healthily so he decided to keep a record of how many pieces of fruit he ate in one week.

He drew a pie chart to show the numbers of each type of fruit he ate.



What was the mode of the different types of fruit?

48. A model spaceship has a scale of 1 : 300.

If the cockpit of the model is 5cm wide, how wide is the cockpit on the real spaceship?

49. Harry went with his mum to the Garden Centre to buy some plants.

They bought 15 trays of pansies at £x each and 12 trays of primulas at £y each.

How much did the plants cost altogether?

A £ 27(x + y)
B £ 15 + x + 12 + y
C £ 15x + 12y
D £ 27 + x + y
E £ 15x - 12y

50. Rachel, Vicky and Georgina went on a shopping trip. They left home at 9:15am and the journey took 20 minutes.

They shopped for 2 hours and 30 minutes before stopping for lunch.

45 minutes later they returned to the shops but only shopped for another hour before setting off home.

If the journey home took 25 minutes, at what time did they get home?

END OF TEST

Maths Paper B

Pupil's Name	Date of Test
School Name	DATE OF BIRTH

PUPIL NUMBER						SCHOOL NUMBER						DATE OF BIRTH				
												Day		Month		Year
[0]	[0]	[0]	[0]	[0]	[0]	[0]	[0]	[0]	[0]	[0]	[0]	[0]	[0]	January ☐		2004 ☐
[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	February ☐		2005 ☐
[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	March ☐		2006 ☐
[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	April ☐		2007 ☐
[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]		[4]	May ☐		2008 ☐
[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]		[5]	June ☐		2009 ☐
[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]		[6]	July ☐		2010 ☐
[7]	[7]	[7]	[7]	[7]	[7]	[7]	[7]	[7]	[7]	[7]	[7]		[7]	August ☐		2011 ☐
[8]	[8]	[8]	[8]	[8]	[8]	[8]	[8]	[8]	[8]	[8]	[8]		[8]	September ☐		2012 ☐
[9]	[9]	[9]	[9]	[9]	[9]	[9]	[9]	[9]	[9]	[9]	[9]		[9]	October ☐		2013 ☐
														November ☐		2014 ☐
														December ☐		2015 ☐

1	2	3	4	5	6	7	8	9
25.5ℓ ☐	1 ☐	1.74kg ☐	26m² ☐	A ☐	2 ☐	A ☐	622.73 ☐	12 ☐
26ℓ ☐	2 ☐	1.64kg ☐	29m² ☐	B ☐	3 ☐	B ☐	621.74 ☐	30 ☐
26.5ℓ ☐	3 ☐	1.21kg ☐	32m² ☐	C ☐	4 ☐	C ☐	621.73 ☐	36 ☐
32ℓ ☐	4 ☐	0.81kg ☐	36m² ☐	D ☐	8 ☐	D ☐	621.8 ☐	60 ☐
32.5ℓ ☐	5 ☐	0.69kg ☐	38m² ☐	E ☐	12 ☐	E ☐	622 ☐	72 ☐

10	11	12	13	14	15	16	17	18
A ☐	09:10 ☐	A ☐	23 ☐	14 ☐	A ☐	11 ☐	15 ☐	39p ☐
B ☐	11:10 ☐	B ☐	22 ☐	17 ☐	B ☐	12 ☐	16 ☐	45p ☐
C ☐	13:10 ☐	C ☐	21 ☐	25 ☐	C ☐	13 ☐	17 ☐	49p ☐
D ☐	15:10 ☐	D ☐	20 ☐	27 ☐	D ☐	14 ☐	18 ☐	52p ☐
E ☐	17:10 ☐	E ☐	19 ☐	54 ☐	E ☐	15 ☐	19 ☐	76p ☐

19	20	21	22	23	24	25	26	27
A ☐	33cm³ ☐	48 ☐	A ☐	6 ☐	5 ☐	A ☐	0.473 ☐	x + 4 ☐
B ☐	66cm³ ☐	60 ☐	B ☐	7 ☐	6 ☐	B ☐	$^4/_9$ ☐	x - 4 ☐
C ☐	204m³ ☐	64 ☐	C ☐	8 ☐	8 ☐	C ☐	0.51 ☐	x - 7 ☐
D ☐	816cm³ ☐	70 ☐	D ☐	9 ☐	9 ☐	D ☐	$^4/_7$ ☐	x + 18 ☐
E ☐	816m³ ☐	72 ☐	E ☐	10 ☐	11 ☐	E ☐	45.6% ☐	x - 18 ☐

28	29	30	31	32	33	34	35	36
2 ☐	A ☐	W ☐	A ☐	A ☐	$^1/_{20}$ ☐	270° ☐	A ☐	A ☐
13 ☐	B ☐	S ☐	B ☐	B ☐	$^2/_{20}$ ☐	245° ☐	B ☐	B ☐
39 ☐	C ☐	SE ☐	C ☐	C ☐	$^1/_{10}$ ☐	240° ☐	C ☐	C ☐
53 ☐	D ☐	NW ☐	D ☐	D ☐	$^1/_5$ ☐	235° ☐	D ☐	D ☐
79 ☐	E ☐	SW ☐	E ☐	E ☐	$^4/_{10}$ ☐	225° ☐	E ☐	E ☐

37	38	39	40	41	42	43	44	45
£15 ☐	176m² ☐	49 ☐	A ☐	£1.04 ☐	90cm ☐	£12 ☐	A ☐	£11.90 ☐
-£15 ☐	184m² ☐	55 ☐	B ☐	£1.18 ☐	30km ☐	£36 ☐	B ☐	£22.10 ☐
£25 ☐	202m² ☐	64 ☐	C ☐	£1.22 ☐	90km ☐	£120 ☐	C ☐	£7.90 ☐
-£25 ☐	246m² ☐	81 ☐	D ☐	£1.44 ☐	65km ☐	£180 ☐	D ☐	£15.90 ☐
£28 ☐	263m² ☐	91 ☐	E ☐	£1.48 ☐	900km ☐	£216 ☐	E ☐	£20.10 ☐

46	47	48	49	50
80cm³ ☐	Bananas ☐	5cm ☐	A ☐	1:50pm ☐
96cm² ☐	Apples ☐	5m ☐	B ☐	2:15pm ☐
42cm² ☐	Peaches ☐	15m ☐	C ☐	2:00am ☐
80cm² ☐	Pears ☐	150cm ☐	D ☐	2:30pm ☐
96cm³ ☐	Oranges ☐	300cm ☐	E ☐	2:00pm ☐