

Maths Paper A

Maths Paper B

1. 13
2. 2
3. E
4. 21m^2
5. 4
6. $\frac{1}{8}$
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. $\frac{1}{6}$
32. 3
33. 60p
34. $\frac{3}{4}$
35. 159°
36. 16
37. 11:27
38. 88
39. 33m^2
40. 3
41. D
42. 1 : 200
43. 5
44. $\frac{2}{6}$
45. 15m
46. 5.674
47. 3,434
48. 644
49. £57.66
50. 11 mins

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. $\frac{4}{9}$
27. $x + 18$
28. 39
29. A
30. S

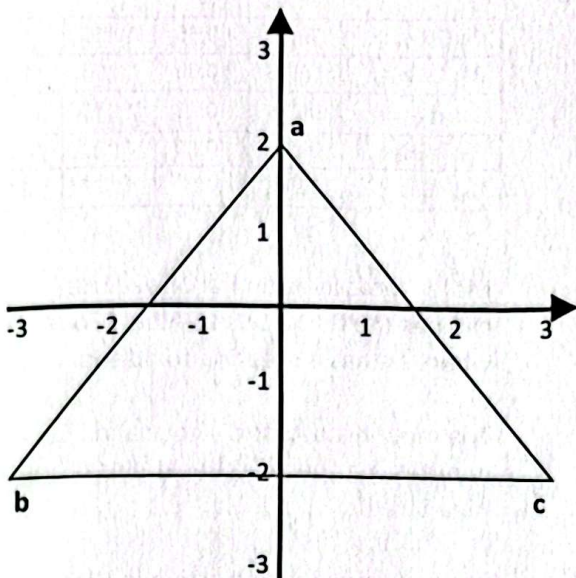
31. C
32. B
33. $\frac{1}{5}$
34. 225°
35. D
36. B
37. £15
38. 176m^2
39. 91
40. E
41. £1.44
42. 90km
43. £36
44. C
45. £7.90
46. 80cm^3
47. Apples
48. 15m
49. C
50. 2:15pm

Maths Paper C

Maths Paper D

1.	129	31.	34m ²	1.	48	31.	C
2.	A	32.	£44.66	2.	B	32.	E
3.	3	33.	360miles	3.	B	33.	3.98kg
4.	96cm ²	34.	£4.15	4.	53m ²	34.	A
5.	D	35.	D	5.	3°C	35.	C
6.	8	36.	(6, 3)	6.	25%	36.	5
7.	C	37.	$\frac{3}{7}$	7.	D	37.	15
8.	D	38.	300	8.	2.05	38.	5
9.	10	39.	$\frac{1}{7}$	9.	B	39.	B
10.	5	40.	13	10.	3 : 2	40.	$\frac{1}{3}$
11.	6	41.	D	11.	259	41.	7
12.	46°C	42.	£13.80	12.	D	42.	$\frac{5}{7}$
13.	$\frac{1}{6}$	43.	D	13.	3.9	43.	270°
14.	12	44.	D	14.	3,827	44.	C
15.	1219	45.	1.25 litres	15.	D	45.	£323
16.	3.7m	46.	(1, 2)	16.	C	46.	$\frac{5}{6}$
17.	2:10pm	47.	60cm	17.	18	47.	526.60
18.	1 : 400	48.	£1.58	18.	0.24m	48.	B
19.	2	49.	B	19.	£56.48	49.	87
20.	6	50.	33	20.	1.85 litres	50.	(5, 4)
21.	120cm ²			21.	$\frac{1}{3}$		
22.	$\frac{3}{5}$			22.	E		
23.	7.79			23.	20km		
24.	3			24.	D		
25.	137.5cm			25.	71°		
26.	£2.29			26.	1051		
27.	77			27.	26		
28.	C			28.	y - 19		
29.	E			29.	$\frac{7}{12}$		
30.	1000g			30.	284		

26.



What are the co-ordinates of the corners of the triangle?

	a	b	c
A	(2, 0)	(-2, -3)	(3, -2)
B	(0, 2)	(-3, -2)	(3, -2)
C	(0, 2)	(-2, -3)	(-2, 3)
D	(2, 0)	(-3, -2)	(-2, 3)
E	(0, 2)	(-2, -3)	(3, -2)

27. Otis is sticking his football stickers into books. He has 252 stickers of Premier League players and 365 stickers of non-Premier League players.

If he can fit 48 stickers in one book, how many books does he need altogether?

28. Robin is organising a sponsored walk. She decides that she needs to have 16 litres of water at each drinks station.

Which of the following containers would she need to buy to hold the water at each drinks station?

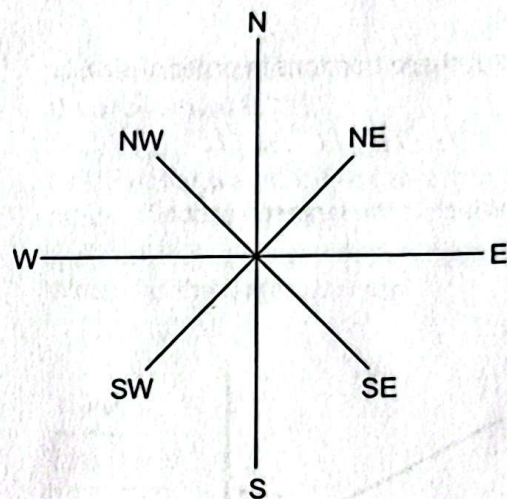
- A jam jar
- B coke bottle
- C bucket
- D plant pot
- E hot tub

29. The table below shows the probability of fog for the next 5 days.

Day	Probability of fog
Monday	$\frac{1}{4}$
Tuesday	$\frac{3}{5}$
Wednesday	$\frac{3}{10}$
Thursday	$\frac{1}{2}$
Friday	$\frac{1}{12}$

On which day would it be least likely to be foggy?

30.



Tom is facing East.
He turns 225° anti-clockwise.

Which direction is Tom facing now?

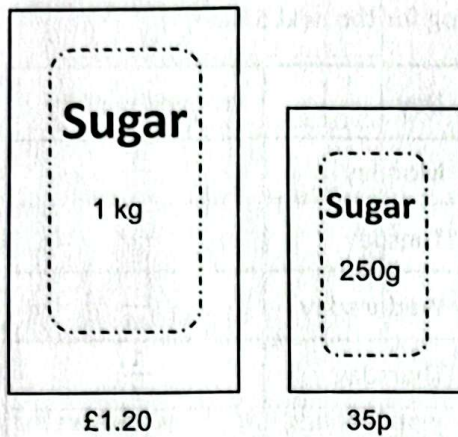
31. In a class, $\frac{1}{3}$ of the children walk to school and $\frac{1}{2}$ of the children come by car. The rest come by bus.

What fraction of the children comes by bus?

32. If $9x + 15 = 42$,

what is the value of x ?

33.



Mr Rogers needs to buy 3kg of sugar.

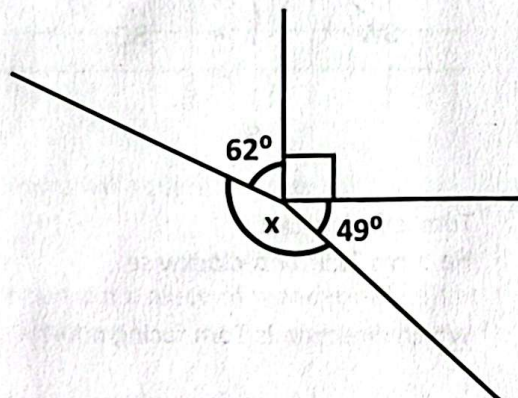
How much can he save by buying the big packs?

34. Put these fractions in order of size.

$$\frac{1}{3} \quad \frac{5}{12} \quad \frac{2}{3} \quad \frac{8}{24} \quad \frac{3}{4}$$

Which is the largest fraction?

35.



What is the size of the angle labelled x?

36. In a darts game, Alex's first three scores were 18, 14 and 12.

After four turns, his mean score was 15.

What was his fourth score?

37.

Park Road	09:10	09:55	10:55	11:30
Bar Lane	09:15	10:00	11:00	11:35
Albert Square	09:28	10:13	11:13	11:48
Peter Street	09:35	10:20	11:20	11:55
High Street	09:42	10:27	11:27	12:02

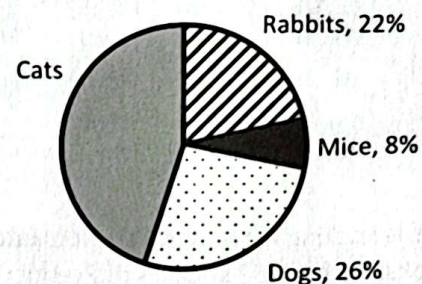
Mr Richards lives on Park Road. He catches the 09:10 bus to Albert Square where he has a meeting to attend.

The meeting lasts for 1 hour and 20 minutes. He then catches the next bus to High Street.

At what time does he arrive in High Street?

38.

Pets belonging to pupils in Year 5



This pie chart shows the proportions of different pets owned by the pupils in Year 5.

There are 16 pet mice.

How many cats are there?

39.

Mr and Mrs Abraham decide to build an outdoor swimming pool. The plot they are going to use measures 13m by 6m, around which will be a hedge.

The pool itself will be 10m by 4.5m with a tiled walkway around it. The walkway will extend to the hedge.

What will the area of the walkway be?

40. This frequency table shows the marks gained in an exam by 34 pupils in class 6W.

One of the corners has been torn off.

Mark scored	Frequency
1 – 20	2
21 – 30	7
31 – 40	13
41 – 50	9
51 – 60	

How many pupils scored between 51 - 60 marks?

41. Which of the following shapes has only one pair of parallel sides?

- A square
- B regular hexagon
- C equilateral triangle
- D trapezium
- E rhombus

42. Rosie is building a model of the Eiffel Tower for a school project.

The Eiffel Tower is 300m high.
The model of the tower is 150cm high.

What is the scale of Rosie's model?

43. Nick is going on a cub camp which costs £165.

Each week he pays £15 towards the cost.

So far he has paid £90.

How many more weekly payments does he need to make?

44. Which of these is the largest?

0.27 $\frac{2}{6}$ 0.31 $\frac{1}{6}$ $\frac{1}{9}$

45. A rectangular swimming pool has a perimeter of 40m.

The width is one-third of its length.

What is its length?

46. What is this number to three decimal places?

5.6738721

47. William added two numbers together. His answer was 6,375.

One number was 493 more than the other.

What was the larger number?

48. Exeter

286	Leeds			
200	198	London		
246	44	202	Manchester	
154	171	56	160	Oxford
373	94	285	144	257 Newcastle

Calculate the total number of miles for this route:

Exeter to Leeds,
Leeds to Manchester,
Manchester to Oxford,
Oxford to Exeter.

49. Mrs Eccles has a discount card for her favourite clothes shop.

It saves her $\frac{1}{4}$ of the full price on any item.

What will she pay for a dress and a pair of shoes which together would normally cost £76.88?

50. The amount of time (in minutes) spent on rides at the fair is calculated by the equation:

$$T = x + 2y + 4z$$

where

x is the number of times you ride the Whirler,

y is the number of times you ride the Ghoster Coaster,

z is the number of times you ride the Monotrail.

Jean-Luc rides the Monotrail once, the Ghoster Coaster twice and the Whirler three times.

How long does he spend on the rides altogether?

END OF TEST

Maths Paper A

Pupil's Name

Date of Test

School Name

DATE OF BIRTH

PUPIL NUMBER						SCHOOL NUMBER					
[0]	[0]	[0]	[0]	[0]	[0]	[0]	[0]	[0]	[0]	[0]	[0]
[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]
[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]
[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]
[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]
[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]
[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]
[7]	[7]	[7]	[7]	[7]	[7]	[7]	[7]	[7]	[7]	[7]	[7]
[8]	[8]	[8]	[8]	[8]	[8]	[8]	[8]	[8]	[8]	[8]	[8]
[9]	[9]	[9]	[9]	[9]	[9]	[9]	[9]	[9]	[9]	[9]	[9]

Day	Month	Year
[0]	[0]	January
[1]	[1]	February
[2]	[2]	March
[3]	[3]	April
	[4]	May
	[5]	June
	[6]	July
	[7]	August
	[8]	September
	[9]	October
		November
		December

1 9	2 1	3 A	4 10m ²	5 2	6 $\frac{1}{3}$	7 A	8 -7°C	9 17
11	2	B	11m ²	4	$\frac{1}{5}$	B	7°C	34
12	3	C	20m ²	8	$\frac{1}{8}$	C	10°C	49
13	4	D	21m ²	10	$\frac{1}{9}$	D	17°C	51
15	5	E	22m ²	14	$\frac{2}{9}$	E	19°C	56

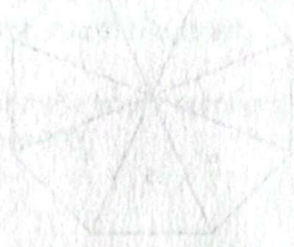
10 A	11 A	12 2	13 100g	14 A	15 A	16 0.004	17 £3.75	18 18m
B	B	3	0.3kg	B	B	0.049	£5.65	20m
C	C	4	500g	C	C	0.409	£9.05	22m
D	D	5	0.7kg	D	D	0.49	£11.65	24m
E	E	6	900g	E	E	0.094	£20.00	26m

19 10%	20 A	21 A	22 55	23 9	24 A	25 £2	26 A	27 10
25%	B	B	60	27	B	£3	B	11
30%	C	C	69	123	C	£4	C	12
50%	D	D	75	198	D	£5	D	13
60%	E	E	80	222	E	£7	E	14

28 A	29 Mon	30 N	31 $\frac{1}{6}$	32 3	33 15p	34 $\frac{1}{3}$	35 131°	36 11
B	Tues	NW	$\frac{1}{4}$	8	20p	$\frac{2}{12}$	149°	14
C	Wed	S	$\frac{2}{3}$	15	40p	$\frac{2}{3}$	159°	16
D	Thurs	SW	$\frac{1}{8}$	27	60p	$\frac{8}{24}$	163°	17
E	Fri	NE	0	51	80p	$\frac{3}{4}$	169°	18

37 09:42	38 60	39 33cm ²	40 1	41 A	42 1:3	43 2	44 0.27	45 9m
10:27	66	37.5m ²	3	B	1:20	3	$\frac{2}{6}$	11m
10:42	74	33m ²	5	C	1:30	4	0.31	12m
11:27	80	118.5m ²	7	D	2:300	5	$\frac{1}{6}$	15m
12:02	88	123m ²	9	E	1:200	6	$\frac{1}{9}$	17m

46 5.673	47 3,187	48 526	49 £19.22	50 7mins
5.773	2,941	586	£38.44	11mins
5.674	3,434	602	£52.44	12mins
5.67	2,891	644	£57.66	17mins
5.678	3,024	670	£59.98	66mins



MATHS PAPER A

Please read the following before you start the test -

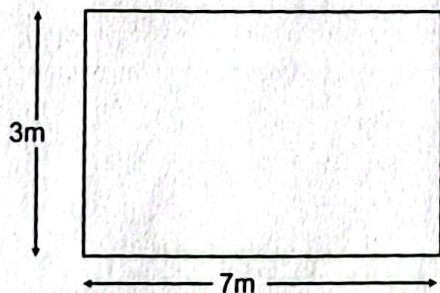
1. Do not begin the test until you are told to do so.
2. This is a multiple choice test so you need to mark your answers on the separate answer sheets, not in this booklet.
3. Mark your answers clearly on the answer sheets using a pencil. In the column that has the same number as the question, draw a 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. Juliette is sorting eggs into boxes of 12.
If she has 156 eggs, how many boxes will she need?
2. How many of the letters in this word have vertical reflective symmetry?

AMBLE

3. A train is travelling at 450mph to the nearest 10mph.
What could the actual speed be?
A 442mph
B 458mph
C 444mph
D 456mph
E 453mph
4. Mrs Angelou is putting a carpet down in her bedroom.



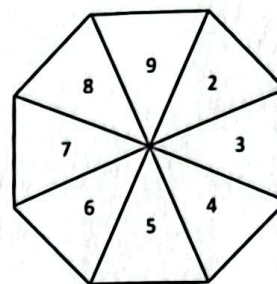
She has measured the floor as shown in the diagram.

What will the area of the carpet be?

5. Simon thinks of a number.
He multiplies it by 7.
Then he takes away 4.
Finally, he halves it and gets the answer 12.

What was the number he thought of?

6.



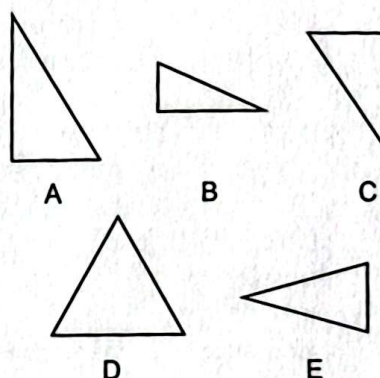
Max has spun the above spinner 9 times.

The results of the spins are:-

3 5 8 9 4 5 7 4 4

What is the probability of getting a 3 on the next spin?

7. Which triangle is an equilateral triangle?



8. The temperature in Toronto is -12°C whilst the temperature in London is 5°C .

What is the difference in temperature between the two cities?

9. What is the missing number?

17	34	51
34		68
51	68	85

10. On a housing estate, the houses are numbered in order. All the odd numbers are on one side of the street.

Which of these house numbers is nearest to number 305?

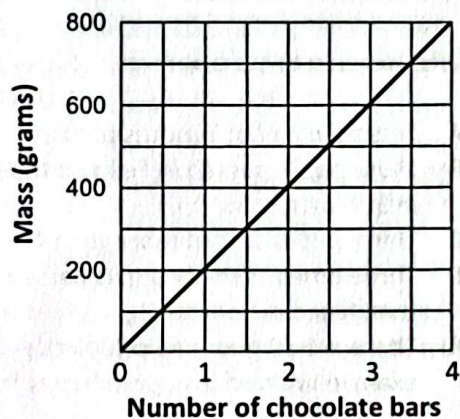
- A 295
- B 311
- C 301
- D 287
- E 333

11. Which of these lengths is the largest?

- A 460,000 mm
- B 4,600 m
- C 46,000 cm
- D 4.06 km
- E 406,000 mm

12. Including 1 and 16, how many factors does 16 have?

13. This graph shows the mass of different numbers of chocolate bars



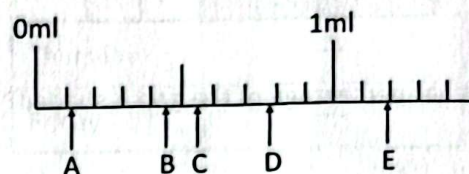
Mollie buys 4 chocolate bars and then eats half of one bar.

What is the mass of the chocolate bars that are left?

14. $3 \times 6 \times 7 =$

- A 3×13
- B 12×7
- C 9×7
- D 21×6
- E 6×10

- 15.



Which arrow points to 0.55ml on the scale?

16. What number is equal to $\frac{49}{1000}$?

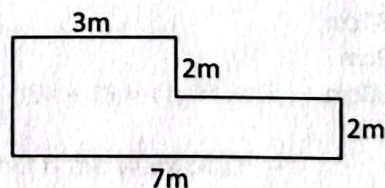
17. The table below shows the prices for cinema tickets

Adults	£7.20
Children (under 12)	£3.75
Family ticket (2 adults, 3 children)	£20.00

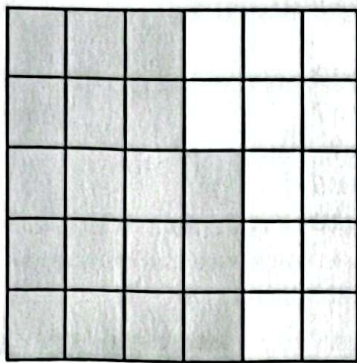
Mr and Mrs Hodgson have 3 children under 12.

If all five of them go to the cinema, how much do they save when they buy a family ticket?

18. What is the perimeter of this garden?

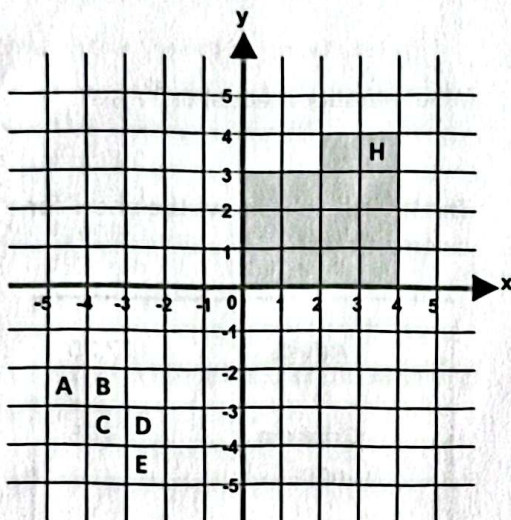


19.



What percentage of the grid is shaded?

20. This shape, made from 14 squares, is rotated 180° about $(0, 0)$.



Where will square H move to?

21. Robert cut a piece of wood for a shelf at 1.6 metres.

Mary cut a piece of wood for a shelf at 2.39 metres.

How much longer in centimetres was Mary's piece of wood?

- A 69cm
- B 131cm
- C 79cm
- D 158cm
- E 88cm

22. Tom scored 75% in his SATS test.
The test was marked out of 80.

How many marks did he get?

23. 3 in 25 comics are not superhero comics.

If Brendan has 225 comics, how many of them are superhero comics?

24. Pupils from five schools took an exam.

This table shows the number of pupils in five mark bands.

Marks	0-10	11-20	21-30	31-40	41-50
School					
St May's	3	6	9	8	5
Field Rd	1	10	7	4	3
Wellred	0	4	3	15	6
Springley	2	5	6	11	4
Tynetus	6	3	4	10	7

The pass mark was 21.

Which statement is true?

- A Less than half of Tynetus passed
- B More pupils passed in Field Rd than in St May's
- C Thirty pupils scored more than 40
- D Three times as many pupils passed than failed in Springley
- E There are 30 pupils who took the exam in Wellred

25. During her holidays, Anya spends some of her pocket money every day.

The amounts she spends each day are:-

£3, £5, £7, £3, £4, £4, £2, £3, £5, £3

What was the modal amount spent?