

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		

MATHS PAPER D

Please read the following before you start the test -

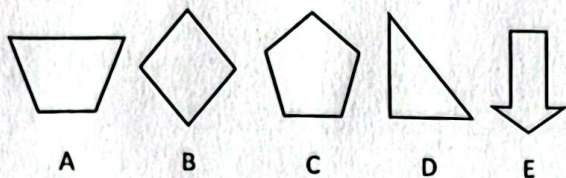
1. Do not begin the test until you are told to do so.
2. This is a multiple choice test so you need to mark your answers on the separate answer sheets, not in this booklet.
3. Mark your answers clearly on the answer sheets using a pencil. In the column that has the same number as the question, draw a 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. At a coffee morning, cakes are cut up into eighths.

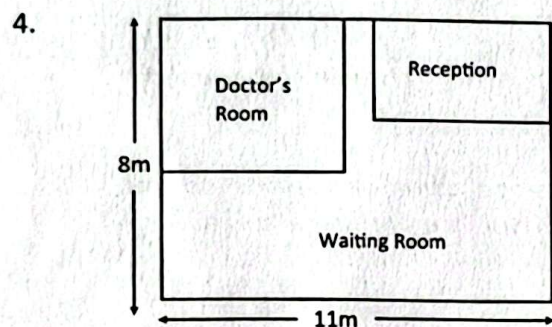
How many pieces would there be if six cakes were cut up?

2. Which one of the following shapes has both reflective and rotational symmetry?



3. What is 3.7×15.3 ?

- A 5661
- B 56.61
- C 5.661
- D 0.5661
- E 0.05661



A new carpet is being laid in the waiting room at a doctor's surgery.

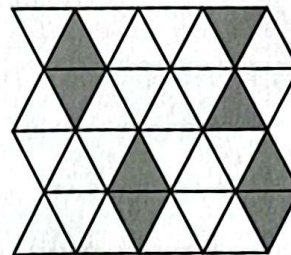
The doctor's room is $5\text{m} \times 4\text{m}$ and the reception is $5\text{m} \times 3\text{m}$.

What is the area of the new carpet?

5. The temperature in a freezer is -7°C whilst the temperature in a fridge is 10°C higher.

What is the temperature in the fridge?

6.



What percentage of the above shape is shaded?

7. Which quadrilateral has got two pairs of parallel sides which are all equal in length and two pairs of equal angles?

- A kite
- B trapezium
- C parallelogram
- D rhombus
- E rectangle

8. What is the range of the following set of numbers?

5.3, 3.25, 4.06, 3.31, 5.102, 4.8, 3.9

9. Julia saves £5 each week for one year. How much does she save?

- A £35
- B £260
- C £60
- D £520
- E £185

10. William collects model cars. He has got 24 racing cars and 36 classic cars.

What is the ratio of classic cars to racing cars?

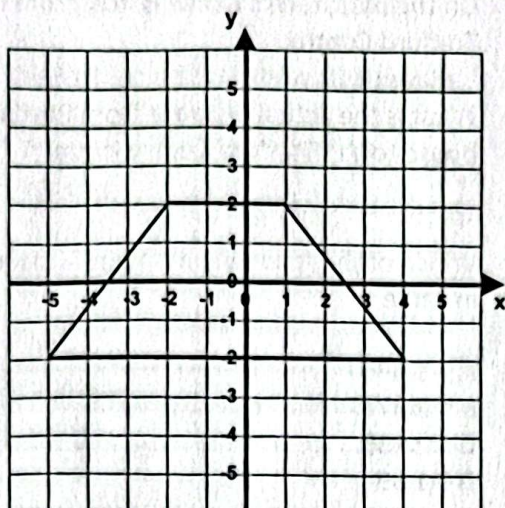
11. In a hotel, the numbers of four neighbouring rooms on one floor are as follows:-

211, 223, 235, 247

What would the next room number be?

Continue to the next page

12. What are the coordinates of the trapezium?



- A (4,2) (1,2) (-2,2) (-5,-2)
 B (4,-2) (1,2) (2,-2) (-5,-2)
 C (-2,4) (2,1) (2,-2) (-2,-5)
 D (4,-2) (1,2) (-2,2) (-5,-2)
 E (-2,4) (1,2) (2,-2) (-2,-5)

13. This number machine divides a number by 3 and then adds 1.9.



What number must be put into the machine?

14. Maddie added two numbers together. Her answer was 7,126.

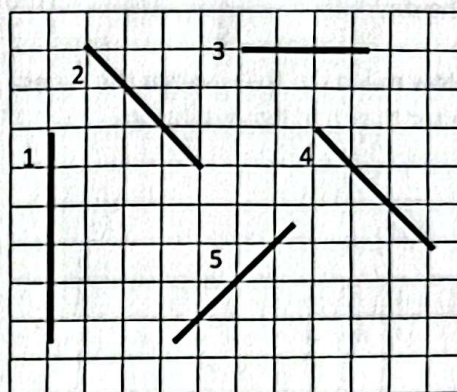
One number was 528 more than the other.

What was the larger number?

15. If $326 \times 30 = 9,780$ which of the following is incorrect?

- A $326 \times 15 = 4,890$
 B $(326 \times 30) + 1 = 9,781$
 C $326 \times (60 \div 2) = 9,780$
 D $(326 \times 29) + 1 = 9,780$
 E $652 \times 15 = 9,780$

- 16.



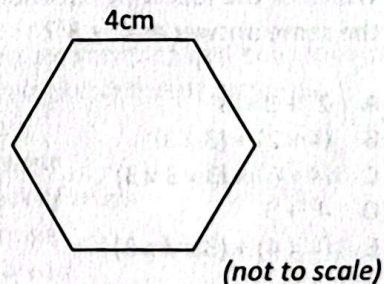
Look at the lines on the above graph and work out which of the following statements is true?

- A 1 and 4 are parallel
 B 3 is vertical
 C 5 and 4 are perpendicular
 D 2 and 4 are not parallel
 E 1 is horizontal

17. Farmer Sugden collects 217 eggs. He puts them into boxes of 12 to sell at the market.

How many boxes can he fill?

18. What is the perimeter of this regular hexagon?



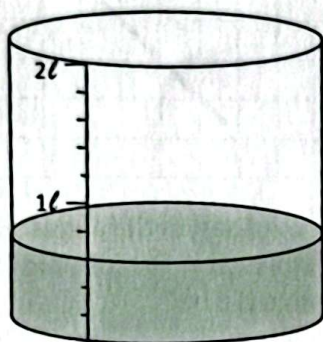
19. St Mary's Hospice held a Jumble Sale to raise funds. The sale was held one Saturday morning.

In the last half hour of the sale, Mrs Crotchett decided to reduce everything by 20%.

Phoebe and Maisie bought goods which would have cost £70.60 at the start of the day.

How much did they pay for the items after they had been reduced?

20.



Another 1250mls are added to the above container.

How much liquid does it now contain?

21. Adam has a bag containing 9 red balls, 18 blue balls, 6 green balls and 21 yellow balls. He picks a ball at random without looking.

What is the probability that he will pick a blue ball?

22. Which of the following equations gives the same answer as $4^2 + 3^3$?

- A $2^4 + 3 + 3$
- B $(4 \times 2) + (3 \times 3)$
- C $(4 \times 4) \times (3 \times 3 \times 3)$
- D $4^2 + 9$
- E $(4 \times 4) + (3 \times 3 \times 3)$

23. The scale on a map is 1 : 500000.

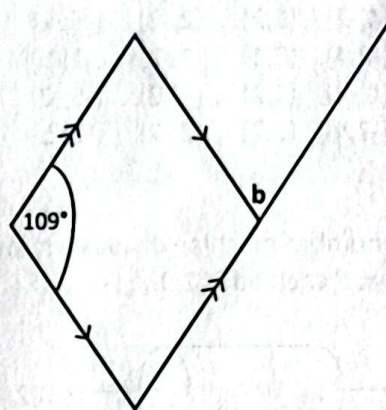
On the map, Ravi's house is 4cm from the Trafford Centre.

What is the actual distance from Ravi's house to the Trafford Centre in km?

24. Which of the following numbers is closest in value to 2?

- A 1.69
- B 2.37
- C 2.135
- D 1.89
- E 1.098

25.



In the above diagram, what is the size of angle b?

26. The following extract from a timetable shows the times of trains from Leeds to Manchester and their stopping points.

Leeds	1008	1040	1110	1140
Dewsbury	1019	1051		1151
Huddersfield	1028	1100	1127	1200
Stalybridge	1054		1145	1218
Manchester	1112	1134	1205	1234

Raife lives in Dewsbury and needs to get to Stalybridge by 1200.

If he can change to a later train at any station, which is the latest train he can catch from Dewsbury to get to Stalybridge on time?

27. One week in May, Corin decides to keep a record of the number of birds he sees in his garden each day at midday.

The following chart shows the results.

Day	No. of birds
Monday	23
Tuesday	34
Wednesday	29
Thursday	?
Friday	38
Saturday	27
Sunday	19

The mean number of birds seen was 28 and the median was 27.

How many birds did Corin see on Thursday?

28. Lara will be y years old in 15 years time.
How old was she 4 years ago?
29. At Busy Bees nursery, $\frac{1}{4}$ of the children prefer orange juice during break.

$\frac{1}{6}$ of the children prefer apple juice.

The rest of the children prefer blackcurrant juice.

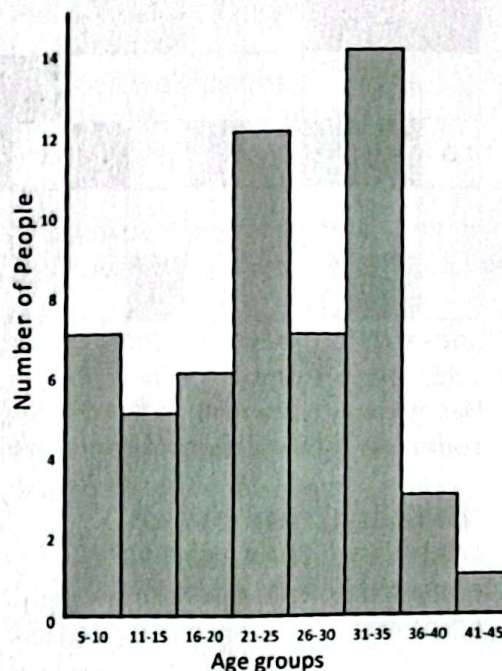
What fraction of the children prefers blackcurrant juice?

30. In a school survey, Year 7 found that for every 4 girls there were 5 boys.

There were 639 children in the school altogether.

How many of the children were girls?

31. This bar chart shows the ages of a group of people.



Which one of the following statements is true?

- A 3 people are 36 or older
- B 7 people are 27 years old
- C 25 people are between 16 and 30 years old
- D 7 people are 15 or younger
- E 5 people are 46 or older

32. Below are sets of three numbers.

Which set contains only prime numbers?

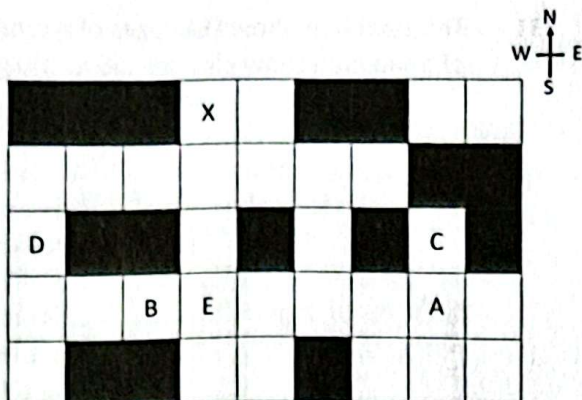
- A 5, 12, 17
- B 3, 213, 555
- C 2, 169, 781
- D 2, 19, 273
- E 3, 29, 43

33. Freddie goes shopping and buys several items weighing different amounts.

Bag of sugar	1kg
Multipack of crisps	180g
Bag of chips	2500g
Loaf of bread	0.3kg

What does his shopping weigh in total?

34.



Happy Harry is standing at X and facing south. He follows the instructions below.

FORWARD 1, TURN LEFT 90°
 FORWARD 2, TURN RIGHT 90°
 FORWARD 2, TURN LEFT 90°
 FORWARD 2

Which square does Happy Harry end up on?

35. Which number has the highest value?

- A 3.4
- B 3.43
- C 3.443
- D 3.44
- E 3.0443

36. How many dots are needed to make the next pattern in the sequence?



37. Linnea and Cerys are together saving up to jointly buy a game which costs £105.

Linnea gets £4 pocket money each week.

Cerys gets £3 pocket money each week.

How many weeks will they have to save their pocket money in order to buy the game?

38. Amber has a plank of wood which measures 5.86m. She needs to cut some shelves from the plank, each measuring 115cm.

How many shelves can she cut from the plank of wood?

39. Liam took 1 hour and 55 minutes to do his homework. Megan took three times as long.

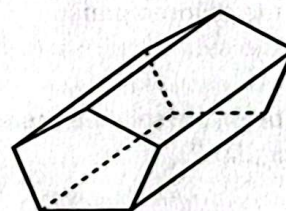
How long did it take Megan to do her homework?

- A 4hr 55min
- B 5hr 45min
- C 3hr 15min
- D 5hr 35min
- E 4hr 45min

40. Abigail and Betty go to a park where there is a slide, a swing and a climbing frame. Each girl decides to go on a different ride.

What is the probability that Betty will go on the slide?

41. How many faces does this pentagonal prism have?

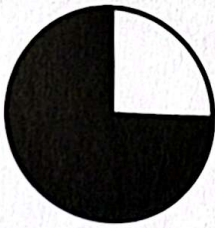


42. Which one of these has the highest value?

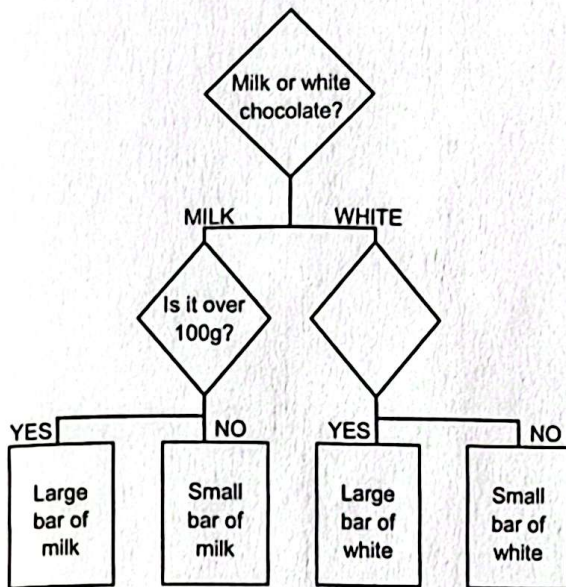
0.63 $\frac{5}{7}$ 62% $\frac{5}{8}$ 0.625

Continue to the next page

43. How many degrees does the shaded part of this circle represent?



44. Here is a diagram that can be used to sort bars of chocolate.



Which of the following statements should go in the empty space?

- A Is it a small bar of chocolate?
- B Is it a bar of white chocolate?
- C Is it over 100g?
- D Does it have a wrapper?
- E Small bar of chocolate

45. Mrs Afzal sold cakes and pies at a coffee morning. Cakes were sold for £6 each and the pies for £5 each.

She used the equation: -

$$T = 6x + 5y$$

to calculate the total amount of money she made during the morning in pounds.

x represents the number of cakes sold
 y represents the number of pies sold.

If she sold 33 cakes and 25 pies, how much money did she make?

46. There are 504 pupils at Bottomley Primary School. 84 of the pupils have a pet dog.

What fraction does not have a pet dog?

47. What is this number to two decimal places?

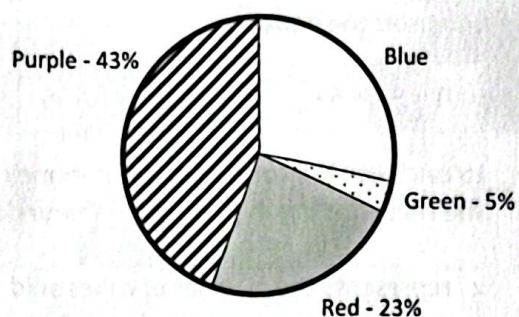
526.5976

48. All the lockers in a gymnasium are odd on one side of the room and even on the other side.

Which of the following lockers is nearest to number 168?

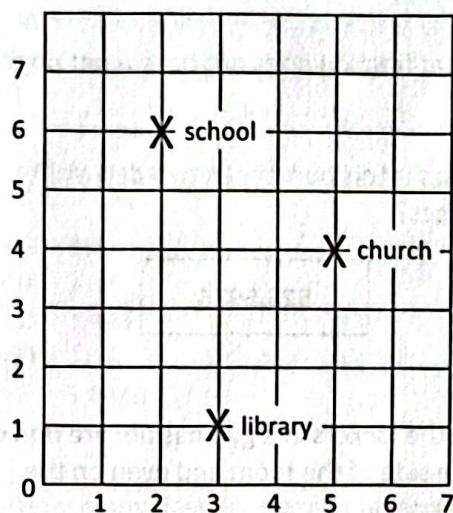
- A 162
- B 172
- C 160
- D 180
- E 174

49. This pie chart shows the colours of bikes owned by Year 6 pupils at Highridge School.



If 69 children own red bikes, how many own blue bikes?

50. Below is a map of the main buildings in a village centre.



What are the coordinates for the church?

Maths Paper D

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]	[4]	May
[5]	[5]	June
[6]	[6]	July
[7]	[7]	August
[8]	[8]	September
[9]	[9]	October
		November
		December

1 12 24 36 48 64	2 A B C D E	3 A B C D E	4 53cm ² 68m ² 20m ² 53m ² 15m ²	5 17°C 3°C -17°C 10°C 12°C	6 8% 40% 25% 15% 33%	7 A B C D E	8 4.06 29.72 1.852 8.55 2.05	9 A B C D E
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10 2:3 36:60 5:2 3:2 2:1	11 248 257 259 261 263	12 A B C D E	13 1.7 15.3 3.9 3.2 3.08	14 3,563 4,091 3,827 3,299 3,999	15 A B C D E	16 A B C D E	17 19 18 17 16 15	18 24m 20m 28m 0.4m 0.24m
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19 £63.54 £56.48 £14.12 £7.06 £84.72	20 1.2r 1750ml 1.85r 1550ml 1450ml	21 $\frac{1}{2}$ $\frac{3}{4}$ $\frac{1}{6}$ $\frac{1}{5}$ $\frac{1}{3}$	22 A B C D E	23 5km 20km 50km 2km 25km	24 A B C D E	25 109° 251° 71° 81° 61°	26 1019 1051 1151 1145 1119	27 29 28 27 26 25
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28 y - 19 y - 15 y + 19 y - 4 y + 15	29 $\frac{5}{12}$ $\frac{5}{6}$ $\frac{7}{12}$ $\frac{1}{3}$ $\frac{2}{3}$	30 355 460 284 280 350	31 A B C D E	32 A B C D E	33 26.48kg 1.73kg 3.98kg 31.1kg 3.71kg	34 A B C D E	35 A B C D E	36 8 7 6 5 4
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37 16 15 14 13 12	38 8 4 7 6 5	39 A B C D E	40 $\frac{1}{2}$ $\frac{1}{4}$ $\frac{2}{3}$ $\frac{1}{3}$ $\frac{1}{5}$	41 5 15 7 10 6	42 0.63 $\frac{5}{8}$ 62% $\frac{3}{4}$ 0.625	43 25° 75° 90° 270° 180°	44 A B C D E	45 £323 £315 £68 £320 £332
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46 $\frac{1}{6}$ $\frac{5}{6}$ $\frac{2}{3}$ $\frac{3}{4}$ $\frac{7}{8}$	47 526.60 526.59 526.598 526.58 526.61	48 A B C D E	49 29 71 89 100 87	50 (2,6) (3,1) (4,5) (5,4) (6,2)
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