

Sutton S.E.T Mock 3 Maths Paper



Name:

Contents: Maths (45 minutes)

- This paper starts with some instructions and further details on timings.
- All answers should be marked on the separate answer sheets provided.

Mock Paper 1 – Maths

Read the instructions carefully.

1. This is a multiple-choice paper where you have to mark your answer to each question on the separate answer sheet.
2. Draw a firm line clearly through the rectangle next to your answer like this . If you make a mistake, rub it out completely and put in your new answer.
3. You will have **45 minutes to answer 50 questions**.
4. You may find some of the questions difficult. If you cannot do a question, do not waste time on it, but go on to the next questions. If you are not sure of an answer, choose the one you think is best.
5. Work as quickly and as carefully as you can.
6. Make sure you can see a clock.
7. Allocate enough time to check your answers at the end.

1 Round 22.876 to 2 decimal places.

A 22

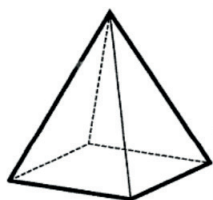
B 22.97

C 22.87

D 22.88

E 22.9

2 The diagram shows a square-based pyramid.



How many edges does the pyramid have?

A 4

B 5

C 6

D 7

E 8

3 What is the product of 12 and 8.5?

A 102

B 108

C 98

D 102.5

E 100

4 Which is the smallest number?

0.4 $\frac{3}{5}$ $\frac{2}{3}$ 0.25 $\frac{5}{10}$

A 0.4

B $\frac{3}{5}$

C $\frac{2}{3}$

D 0.25

E $\frac{5}{10}$

5 A headteacher is arranging for the children to go to the theatre. They will hire minibuses to take the children to the theatre. Each bus takes 16 children. There are 150 children in total.

How many buses will the school need to take all the children to the theatre?

A 5

B 7

C 9

D 10

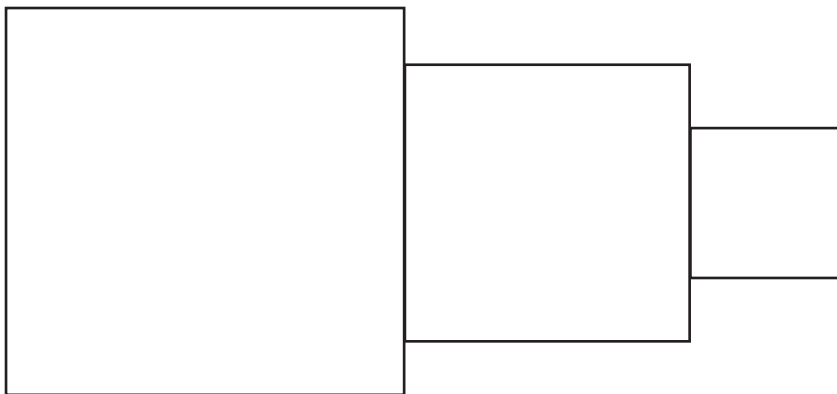
E 11

- 6 Jane is watching birds play in her garden. She noted that 3 out of 7 were pigeons. She recorded 42 birds in total.

How many birds were not pigeons?

- A 10
- B 15
- C 18
- D 24
- E 30

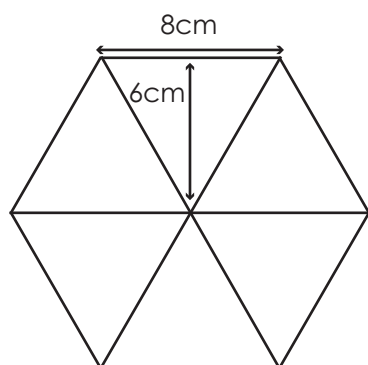
- 7 A square of area 49cm^2 , a square of perimeter 20cm and a square of area 9cm^2 are positioned next to each other, as shown below.



What is the perimeter of the new shape formed?

- A 38cm
- B 40cm
- C 41cm
- D 43cm
- E 44cm

- 8 The hexagon is made up of 6 identical triangles.



What is the area of the hexagon?

- A 120cm²
- B 144cm²
- C 160cm²
- D 220cm²
- E 288cm²
- 9 75 children from across Reception and Year 1 were asked what their favourite animal was.

	Reception	Year 1
Rabbit	12	8
Dog	?	37
Hamster	4	6

How many Reception children said that dogs were their favourite animal?

- A 12
- B 59
- C 8
- D 24
- E 17

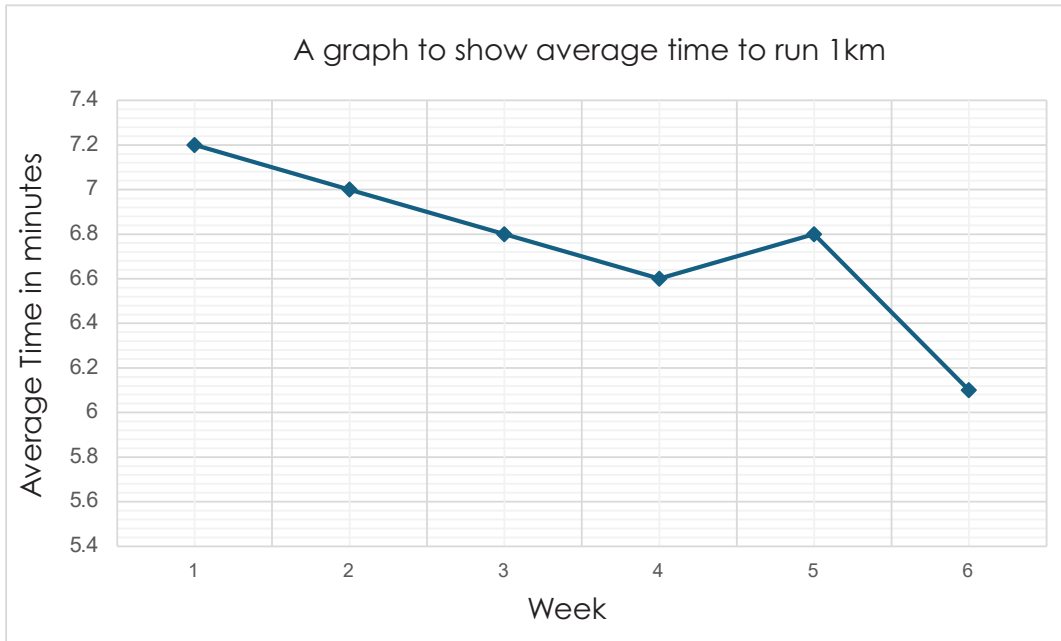
- 10** This is a coach timetable. Use this table to answer questions 10 and 11.

Explore Coaches – Daily Timetable (Monday – Friday)				
	Coach A	Coach B	Coach C	Coach D
Parkside	08:15	09:30	10:45	11:05
Riverview	08:45	10:00	11:15	11:37
Hilltop	09:10	10:30	11:40	12:15
Market Square	09:45	11:05	12:20	12:56

Liam wants to travel from Riverview to Market Square in the shortest possible time. Which coach should he take?

- A Coach A
- B Coach B
- C Coach C
- D Coach D
- E All coaches take the same amount of time.
- 11** If Coach D is delayed at Parkside by 7 minutes and delayed at Riverview by a further 6 minutes, what time will it arrive at Hilltop?
- A 11:50
- B 12:20
- C 12:28
- D 12:15
- E 13:38

The graph below shows the average time it took year 6 students to run 1km over a six-week period. Use the graph to answer questions 12 – 14.



- 12** What was the average running time in week 4?
- A 7.2 minutes
 - B 7 minutes
 - C 6.8 minutes
 - D 6.6 minutes
 - E 6.2 minutes
- 13** How many weeks had an average time less than 6.7 minutes?
- A 1 week
 - B 2 weeks
 - C 3 weeks
 - D 4 weeks
 - E 5 weeks

14 What is the difference in average time for week 1 to week 6?

- A 1 minute
- B 1.1 minutes
- C 0.6 minutes
- D 1.2 minutes
- E 1.8 minutes

15 Calculate $23.6 + 14.9 =$

- A 38.2
- B 37.4
- C 38.5
- D 37.7
- E 37.15

16 $(4X)^3 = 512$

What is the value of X?

- A 2
- B 4
- C 8
- D 16
- E 20

- 17** A school has 480 pupils. 40% of the pupils are boys. 25% of the girls wear glasses. How many girls wear glasses?
- A 72
- B 192
- C 288
- D 55
- E 98
-
- 18** A bag contains 4 red counters, 3 blue counters and 5 green counters. One counter is picked at random.
- What is the probability that the counter is not green?
- A $\frac{2}{6}$
- B $\frac{5}{12}$
- C $\frac{7}{12}$
- D $\frac{3}{12}$
- E $\frac{1}{3}$
-
- 19** Jasmine pours out 300ml of juice from a full jug. She has poured out $\frac{3}{8}$ of the juice in the jug. How much juice was in the jug to start with?
- A 500ml
- B 750ml
- C 600ml
- D 800ml
- E 900ml

- 20** In a sweet shop, the ratio of chocolate bars to sweets is 3:5. If there are 120 sweets, how many chocolate bars are there?

A 45

B 60

C 72

D 75

E 80

- 21** A teacher recorded the results of 9 children in a maths test. The test was out of 20 marks.

Child 1	Child 2	Child 3	Child 4	Child 5	Child 6	Child 7	Child 8	Child 9
8	11	7	16	3	10	13	8	5

What is the average result for the maths test?

A 7

B 8

C 9

D 10

E 11

- 22** Which of these numbers is a multiple of both 6 and 8?

A 24

B 36

C 42

D 30

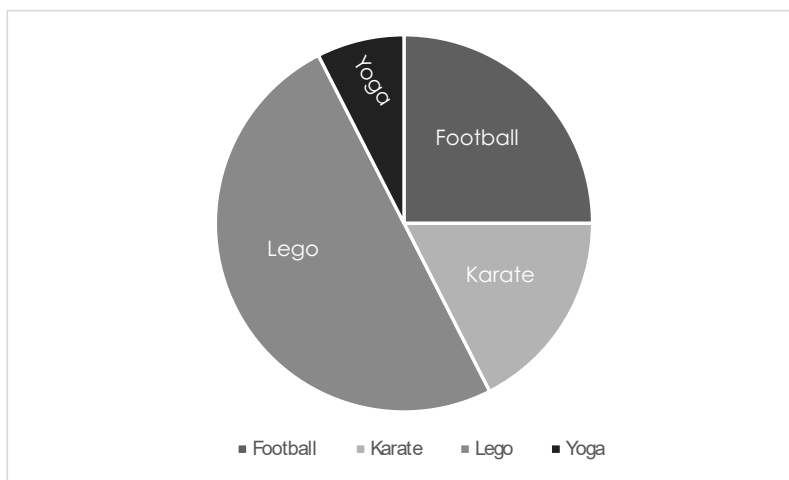
E 32

- 23** Five bakers each baked a tray of cupcakes. Their baking times in minutes (m) and / or seconds (s) are shown in the table below.

Baker 1	Baker 2	Baker 3	Baker 4	Baker 5
1.5 m	1 m 47 s	109 s	1 m 36 s	1.25 m

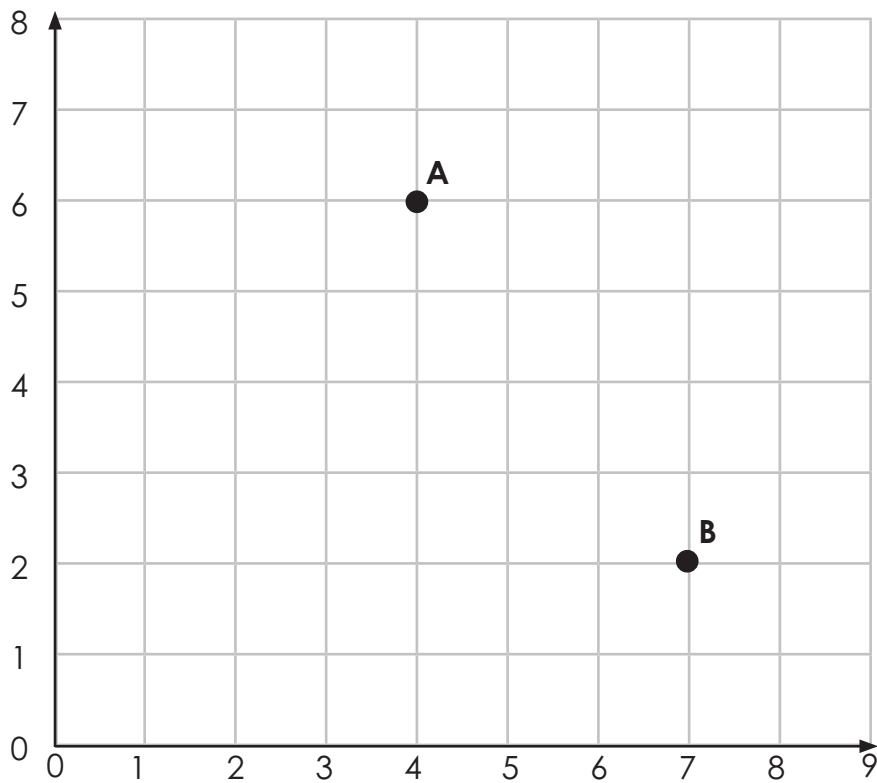
Who bakes their cupcakes the fastest?

- A Baker 1
- B Baker 2
- C Baker 3
- D Baker 4
- E Baker 5
- 24** 200 children were asked what their favourite after-school club is. 35 children voted for karate. How many said their favourite after-school club was yoga?



- A 10
- B 15
- C 20
- D 50
- E 30

- 25** Point A has been translated to Point B.



Which one of the following describes the correct translation?

- A 5 down, 3 right
 - B 2 right, 4 down
 - C 3 left, 4 down
 - D 3 right, 5 down
 - E 3 right, 4 down
- 26** What is the difference between 2,045 and 1,457?
- A 595
 - B 588
 - C 576
 - D 587
 - E 591

27 Calculate 15% of 240.

A 24

B 26

C 32

D 36

E 38

28 If £36 is divided equally between 9 people, how much does each person get?

A £2

B £3

C £4

D £5

E £6

29 A train leaves at 08:15 and arrives at 10:05. How long is the journey?

A 1 hour and 30 minutes

B 1 hour and 25 minutes

C 1 hour and 45 minutes

D 1 hour and 50 minutes

E 1 hour and 20 minutes

- 30** A farmer has 127 apples. He can fit 8 apples in a bag. How many bags does he need?
- A 12
- B 13
- C 14
- D 15
- E 16
- 31** A car travels 135m in 3 hours. What is its average speed in miles per hour?
- A 45
- B 40
- C 35
- D 30
- E 25
- 32** What is the value of x in this equation?
- $$3x + 4 = 19$$
- A 7
- B 5
- C 3
- D 2
- E 6

- 33** A square has an area of 81cm^2 . What is the length of one side in mm?
- A 9mm
 - B 3mm
 - C 90mm
 - D 30mm
 - E 80mm
- 34** A triangle has a base of 8cm and a height of 5cm. What is its area?
- A 40cm^2
 - B 64cm^2
 - C 20cm^2
 - D 24cm^2
 - E 36cm^2
- 35** A jug holds 2.5 litres of juice. 500ml of juice is poured into a glass. How many millilitres of juice are left in the jug?
- A 0.2ml
 - B 2ml
 - C 20ml
 - D 200ml
 - E 2,000ml

- 36** A right-angled triangle has one angle of 90° and another of 40° . What is the third angle?
- A 50°
 - B 230°
 - C 30°
 - D 120°
 - E 40°
- 37** A scale drawing uses the scale $1\text{ cm} = 10\text{ m}$. A wall is 3.5 cm long on the drawing. What is its real length?
- A $3,500\text{ m}$
 - B 35 m
 - C 3.5 m
 - D 0.35 m
 - E 350 m
- 38** What is the product of the first three prime numbers?
- A 15
 - B 21
 - C 42
 - D 30
 - E 18

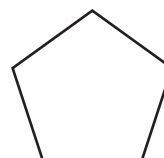
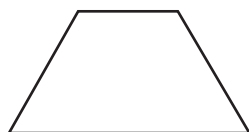
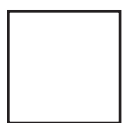
39 Fahima has twenty-seven 50-pence pieces. How many 10-pence pieces does Fahima need to increase her money to £15?

- A 3
- B 7
- C 15
- D 5
- E 12

40 What number is 7 less than half of 7 million?

- A 34,999
- B 349,993
- C 3,499,939
- D 3,499, 893
- E 3,499,993

41 How many of these shapes have exactly one line of reflective symmetry?



- A 0
- B 1
- C 2
- D 3
- E 4

- 42** What is 247,657 rounded to the nearest 100?
- A 247,700
 - B 247,660
 - C 250,657
 - D 247,600
 - E 24.7657
- 43** A plane arrived at its destination at 16:34 after a flight time of 5 hours and 45 minutes. At what time did the plane start its journey?
- A 11:34
 - B 10:49
 - C 11:00
 - D 10:51
 - E 11:01
- 44** What number must replace the question mark to make the statement true?
- $$40 \times ? = 30$$
- A 0.5
 - B 1.5
 - C 0.6
 - D 0.75
 - E 0.25

- 45** 10 friends share 5 pizzas between them. If each pizza is cut into 6 pieces, how many pieces does each friend receive?
- A 2
- B 2.5
- C 3
- D 3.5
- E 4
- 46** What is 67% as a decimal?
- A 6.7
- B 0.067
- C 67.0
- D 0.67
- E 67.06
- 47** To add up the angles in a polygon, you subtract 2 from the number of sides and multiply the result by 180° . What do the angles of a hexagon add up to?



- A $1,080^\circ$
- B 600°
- C 120°
- D 840°
- E 720°

- 48** The hour hand and the minute hand of a clock are at an angle of 90° to each other. Which of the following could be the correct time?
- A 00:00
 - B 15:00
 - C 14:00
 - D 22:00
 - E 18:00
- 49** What number comes next in the sequence?
- 4, 6, 10, 18, 34, ?
- A 55
 - B 68
 - C 58
 - D 66
 - E 60
- 50** If $\frac{3}{5}$ of a number is equal to 24, what is half of the number?
- A 24
 - B 18
 - C 15
 - D 20
 - E 6

END OF MATHS TEST

Working-out Space

[illegible]

