Bond
No.1 for exam success

11+ Maths

Multiple-choice Test Papers
Pack 1
Test 4

Read the following carefully:

- Do not begin the test or open this booklet until told to do so
- Work as quickly and as carefully as you can
- Answers should be marked in pencil in the answer booklet provided, not in this test booklet
- You may do rough working on a separate sheet of paper
- If you make a mistake rub out the mistake and write the new answer clearly
- Be careful to keep your place in the accompanying answer booklet
- You will have 50 minutes to complete the test
- Calculators should not be used

1 There are 60 children at a Christmas Party, of whom 23 are boys. Approximately what proportion is this?

A $\frac{1}{2}$ B $\frac{1}{3}$ C $\frac{1}{4}$ D $\frac{2}{5}$ E $\frac{5}{12}$

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2 What is the formula for the area of this shape?

A x^2 B y^2 C $4xy$

D $3xy$ E $(x+y)^2$

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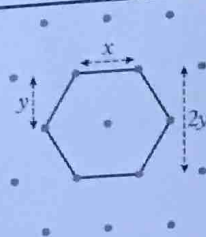
3 Ravi takes the bus from home to school then school to home for five days each week. Each fare is 57p. What is the total of the fares he pays each week?

A £5.80   B £5.70   C £4.70   D £2.85   E £5.60

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4 350 pupils were asked how they came to school. The results are displayed in the pie chart. How many pupils came to school by car?

A 147   B 42   C 210

D 140   E 150

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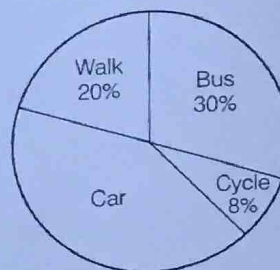
5 A joiner is building 14 cupboards in a new kitchen. Each cupboard requires 26 screws. How many screws will be required in total?

A 260   B 380   C 364   D 366   E 370

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6 This machine divides by 4 and then multiplies by 5. Which number comes out?

92 ⟶ [ ] ⟶ ?

A 23   B 18.4   C 73.6
D 110   E 115

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7 What percentage of the diagram has been shaded?
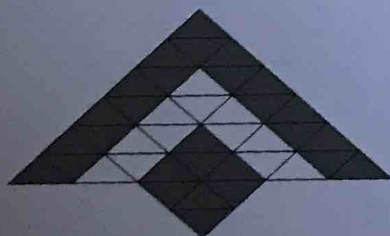
A 70%   B 65%

C 60%   D 40%

E 30%

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8 Carmel has joined her local gym. She pays x pounds each month in membership fees. She also joins a Pilates class once a week and goes every week in the year. Each class costs y pounds. What is the total amount Carmel pays each year?

A $12x + y$ B $52(x + y)$ C $12x + 52y$ D $12(x + y)$ E $52x + 12y$

9 The Science Department is going on a day trip to the National Science Museum. The trip costs £25 and 43 people are going and have paid the full amount. How much money has been collected in total?

A £1000   B £1075   C £2150   D £1100   E £1125

10 There are 240 books in the school library. $\frac{1}{5}$ of the books are fiction. $\frac{2}{5}$ of the books are non-fiction. The rest are reference books. How many reference books are in the school library?

A 72   B 96   C 144   D 98   E 94

11

	?	6	→ 33
9		13	→ 33
	10		→ 33

↓ 33   ↓ 33   ↓ 33

When every space in the grid is filled in, each row and each column adds up to 33.
Which number should be in the square with the question mark?

A 6   B 9   C 11   D 12   E 13

12 A computer checks emails and news updates on a regular basis. The computer checks emails every five minutes and news updates every seven minutes.
Neither work when both checks are being done at the same time and this causes an error message on the screen. There is one error message after an hour and three error messages after two hours. How many error messages are there after 5 hours?

A 6   B 7   C 8   D 9   E 10

13 Debbie wants to create her own small flower garden. She goes to the garden centre with her mum and buys some bulbs. She buys:

5 bulbs at £1.20.   4 bulbs at 95p.   3 bulbs at 75p.   6 bulbs at 50p.   2 bulbs at £1.40.

How much is her total bill?

A £4.80   B £14.85   C £17.85   D £20.00   E £32.80

14 This table shows the results for Tanvi's favourite netball team.

Year	Won	Drawn	Lost
2012	9	3	1
2013	6	2	5
2014	5	8	0

How many matches in total did the team not win?

A 19   B 6   C 13   D 20   E 18

15 There are 500 sheets of paper in a ream. How many sheets of paper are in 6.5 reams?
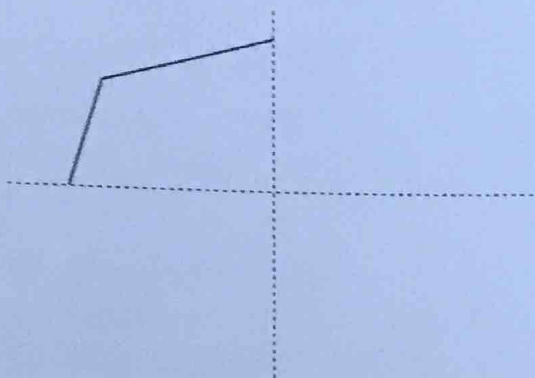
A 3500   B 3000   C 3150   D 6500   E 3250

16 Woodside School did a survey on favourite fruit. Which of the numbers given below is the number of pupils who liked apples best?

Favourite fruit	
Apple	⌐ ⌐
Orange	⌐ ⌐
Banana	
Pear	⌐ ⌐ ⌐ ⌐
Kiwi	⌐

Key: ⌐ stands for 6 children
⌐ stands for fewer than 6 children

A 6   B 12   C 18

D 0   E 11

17

The diagram shows part of a shape and two lines of symmetry. What is the name of the complete shape?

A irregular quadrilateral

B irregular hexagon

C irregular octagon

D irregular decagon

E regular octagon

18 A map of the Yorkshire Dales is drawn to a scale of 1:25 000. What real distance does 1 cm on the map represent?

A 25 km   B 0.025 km   C 0.25 km   D 250 km   E 2.5 km

19 What does the digit 8 in 203 081 represent?

A 8   B 80   C 8000   D 800 000   E 800

20 Which container will hold about 0.5 litres when full?

A a bath   B a sink   C a kettle   D a milk bottle   E an egg cup

21 Josh is going on a holiday for a week this August. He has paid a deposit of £50 towards the total cost of £225. He can afford to save £35 per month towards the total cost. How many months will it take him to save enough to pay the rest of the money?

A 4   B 5   C 6   D 7   E 8

22 The perimeter of a rectangle is 22 cm. If the lengths of two sides are both 10 cm, what is the area of the rectangle?

A 10 cm²   B 11 cm²   C 20 cm²   D 32 cm²   E 220 cm²

23
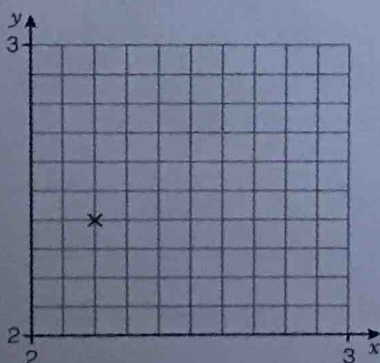
What are the coordinates of the cross?

A (2.2, 2.4)

B (2.1, 2.5)

C (2.2, 2.3)

D (2.1, 2.4)

E (2.4, 2.2)

24

Your task is to guide the aeroplane from the Runway R to GATE 9.
It can only move FORWARD, TURN RIGHT 90° and TURN LEFT 90°.
Which instructions will guide the plane to the correct gate?

A FORWARD 3, TURN RIGHT 90°, FORWARD 3, TURN LEFT 90°, FORWARD 2, TURN RIGHT 90°, FORWARD 1

B FORWARD 3, TURN LEFT 90°, FORWARD 3, TURN RIGHT 90°, FORWARD 2, TURN LEFT 90°, FORWARD 1

C FORWARD 3, TURN RIGHT 90°, FORWARD 3, TURN RIGHT 90°, FORWARD 2, TURN RIGHT 90°, FORWARD 1

D FORWARD 3, TURN LEFT 90°, FORWARD 3, TURN LEFT 90°, FORWARD 2, TURN RIGHT 90°, FORWARD 1

E FORWARD 3, TURN LEFT 90°, FORWARD 3, TURN RIGHT 90°, FORWARD 2, TURN RIGHT 90°, FORWARD 1

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25 Mr McCaskill is 6 feet 3 inches tall. Which is the closest to his height in metres?

A 1.8 m   B 1.9 m   C 2.0 m   D 2.1 m   E 2.2 m

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26 400 g of a 2.2 kg bag of muesli is oats. What fraction of the bag is oats?

A $\frac{1}{9}$ B $\frac{1}{10}$ C $\frac{2}{11}$ D $\frac{3}{12}$ E $\frac{4}{26}$

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27 What is the perimeter of this shape?

A $2a + 2b + 2c + 2d + 2e$

B $2a + 2b + 2c + 2d$

C $2a + b + c + 2d + 9e$

D $abcde$

E $abcd$

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28 Which of these makes a word when rotated through 180°?

NOZE   NOS   HOSE   ICON   TON

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29 Nankunda was x years old six years ago. How old will she be in seven years' time in terms of x?

A $x + 13$ B $x + 7$ C $x + 6$ D $x + 1$ E $x - 1$

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30 Which number is both a square number and a cube number?

A 4   B 8   C 27   D 36   E 64
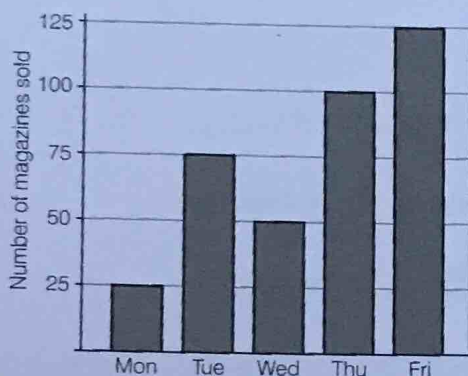

Please turn over

31 Which of these statements is incorrect?

A   Line P is parallel to line T.

B   Line R is perpendicular to line U.

C   Line T is a vertical line.

D   Line S is parallel to line V.

E   Line W is a horizontal line.
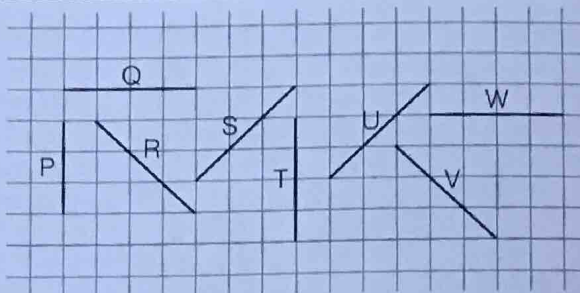
32

This shows the number of magazines sold by a shop in five days. How many more magazines were sold on Wednesday than on Monday?

A   25

B   50

C   75

D   100

E   125

33 Which one of these has the closest value to 1?

A   0.95   B   94.3%   C $\frac{24}{25}$ D   94.29%   E $\frac{24}{27}$
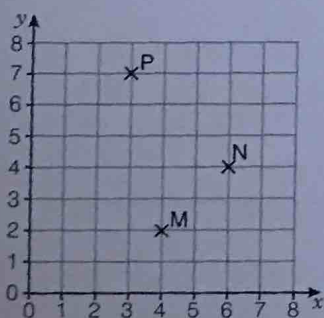
34 These are the temperatures in °C recorded at midday during Susan's two-week holiday.

| 26 | 28 | 27 | 28 | 26 | 25 | 26 |
| 25 | 27 | 28 | 29 | 31 | 31 | 28 |

What is the modal temperature?

A   28°C   B   27°C   C   31°C   D   30°C   E   29°C

35 What are the coordinates of M, N and P?

A   M (4, 2)   N (4, 6)   P (4, 7)

B   M (4, 2)   N (6, 4)   P (3, 7)

C   M (4, 2)   N (7, 4)   P (7, 3)

D   M (2, 4)   N (6, 4)   P (3, 7)

E   M (5, 2)   N (6, 3)   P (3, 7)

36 Which ratio is not equivalent to the ratio 36:20?

A   18:10   B   9:5   C   27:15   D   54:30   E   46:25

37 David is three times as old as his sister. In two years' time he will be 14. How old is his sister?
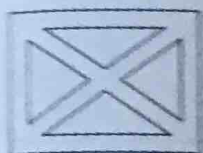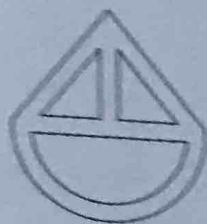
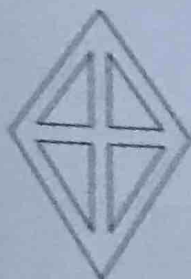A   3   B   12   C   4   D   16   E   5

38 A paperboy delivers papers to a housing estate. He does not want to visit the same street more than once, but can pass over the same street corners. On which housing estate is this possible?
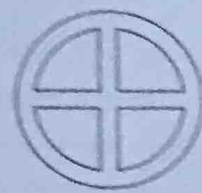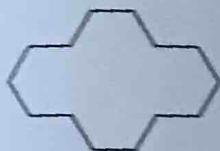
A   B   C   D   E

39

This shape is made from a parallelogram and an equilateral triangle. What is the size of angle p?

A   60°   B   70°   C   120°   D   240°   E   110°

40

The sides of both shapes are the same length. How many times will the smaller shape fit into the larger shape?

A   24   B   18   C   20   D   26   E   22

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41 The cost of installing a broadband service has been reduced by 40%. The original cost was £38.50. How much is it now?

A   £22.10   B   £23.10   C   £24.50   D   £19.25   E   £15.40

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42 There are 432 seats available for a musical. 26 seats are complimentary to the staff and the press. 217 are sold in advance to family and friends of the cast and backstage crew. The rest of the tickets are available to the general public. How many are available to the general public?
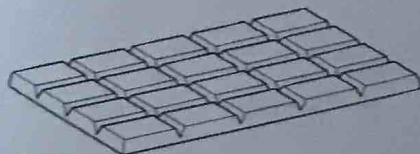
A   217   B   215   C   191   D   189   E   406

43

A chocolate bar has 20 pieces.
Sharma eats eight pieces.
What percentage of the pieces is left?

A   40%   B   50%   C   60%   D   70%   E   80%

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44 Look at the table showing how long Sarah has to wait for her school bus in one week.

Day	Monday	Tuesday	Wednesday	Thursday	Friday
Minutes	7	5	1	0	9

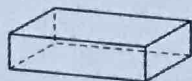What is the range?

A   9   B   0   C   4.5   D   8   E   22
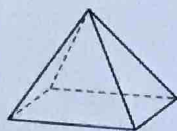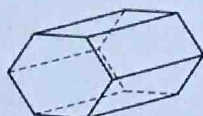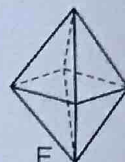
45

A   B   C   D   E

Which of these solids has an even number of edges and an odd number of faces?

46

The coordinates of the end points of five lines are given below. Which line is perpendicular to the line in the diagram?
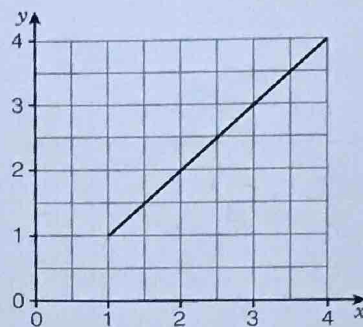
A   (2, 1) and (3, 4)   B   (1, 4) and (4, 4)

C   (1, 1) and (4, 4)   D   (1, 4) and (4, 1)

E   (1, 2) and (3, 1)

47

A thermometer shows the temperature at midday and midnight outside the school office. On Wednesday it showed the following:

Midday	8°C
Midnight	⁻3°C

What is the difference between these two temperatures in degrees Celsius?

A   5°C   B   3°C   C   8°C   D   12°C   E   11°C

48

Rulers cost the same as erasers. Four of the following cost the same. Which does not cost the same as the rest?

A   two rulers, three erasers

B   one eraser, one ruler, six pencils

C   two erasers, two rulers, two pencils

D   two rulers, two erasers, four pencils

E   three erasers, one ruler, two pencils

49

Which number has the value closest to 7?

A   7.001   B   6.989   C   7.101   D   6.99   E   7.0

50

This bar chart shows the times of goals scored in school football matches in one season. How many goals were scored after more than 45 minutes had passed?

A   7   B   16

C   15   D   32

E   8