THE TRANSFER TEST

GL

Practice Test

Maths Paper 6

Time: 45 minutes

This test must not be copied.

1 Look at the number below

837.82

What is the value of the 7 in this number?

A 7 hundreds

B 7 tenths

C 7 tens

D 7 hundredths

E 7 units

2 A teacher has 243 pencils. He wants to put the pencils into 27 tubs. Each tub must contain the same number of pencils.

Which calculation must the teacher do to work out how many pencils go in each tub?

A 243 - 27

B 27 ÷ 243

C 243 ÷ 27

D 27 - 243

E 27 + 243

3 **How many quarter litre glasses can be filled from a jug which holds 13.5 litres of water?**

A 54 glasses   **B** 3.375 glasses **C** 52 glasses   **D** 53 glasses   **E** 42 glasses

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4 Look at the sequence of numbers below.

126, 130, 136, 144, 154, ?

What is the next number in the sequence?

A 164   **B** 160   **C** 162   **D** 168   **E** 166

5 Tim is using tiles to make "square" shapes. Tim uses 4 tiles to make the shape below. There are 2 tiles in the bottom row.
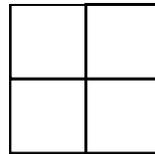
Tim uses 9 tiles to make a bigger square. The new square is shown below. There are 3 tiles in the bottom row of this square.
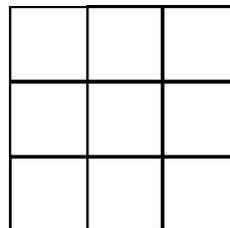
How many tiles does Tim need to make a square with 6 tiles in the bottom row?

A 12   **B** 36   **C** 18   **D** 24   **E** 30

**6** **Tim uses 49 tiles to make a new square. How many tiles are in the bottom row?**

A 5   **B** 6   **C** 7   **D** 8   **E** 8

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7   Look at the statement below.

x + 4.2 = 6.1

Use this statement to complete the statement below.

x + 11.7 = ?

A 1.9   **B** 10.3   **C** 13.6   **D** 13.8   **E** 12.6

8   Cara uses her calculator to carry out the calculation:

148 x 3.2 = 473.6

Which calculation gives the answer 473.6?

A 14.8 x 320
B 1480 x 0.32
C 1480 x 0.032
D 148 x 32
E 1.48 x 3200

9   Look at the two numbers below.

0.4   0.39

If you multiply the larger of the two numbers by 100 what number do you get?

A 39   **B** 3.9   **C** 40   **D** 4.0   **E** 400

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10 Look at the five numbers below.

0.28   0.193   0.3 $\frac{1}{4}$ $\frac{1}{3}$

What is the smallest number?

A 0.28   **B** 0.193   **C** 0.3   **D** $\frac{1}{4}$ **E** $\frac{1}{3}$

11 **What is the largest number?**

A 0.28   **B** 0.193   **C** 0.3   **D** $\frac{1}{4}$ **E** $\frac{1}{3}$

12 Two small towns, called Horton and Tenby, are connected by a long straight road. The signpost below is located on the road between the towns.

Horton (1.7km)   Tenby (0.8km)
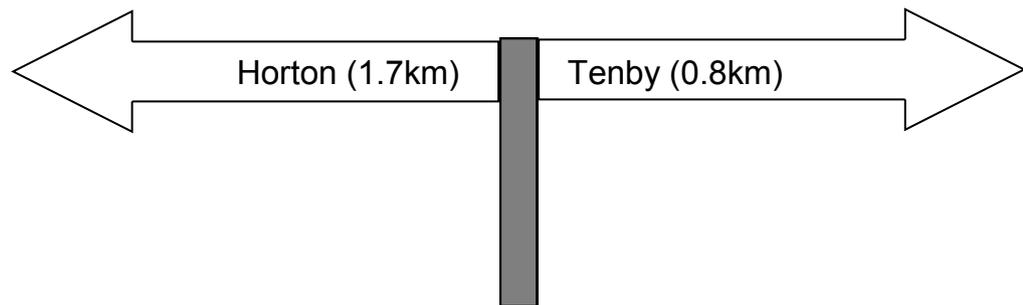
What is the distance between the 2 towns?

A 1.5km   **B** 2.3km   **C** 0.9km   **D** 2.5km   **E** 2.7km

13 Carol leaves school at 2:50 pm and walks home at a steady speed. Carol lives 2 kilometres from the school. Carol arrives home at 3:30 pm.

How many metres does Carol walks in one minute?

A 50m   **B** 40m   **C** 200m   **D** 80m   **E** 60m

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14 The temperature in Toronto is –3°C and the temperature in Madrid is 8°C.

What is the difference in temperature between Toronto and Madrid ?

A 5°C   **B** 6°C   **C** 11°C   **D** 12°C   **E** 12°C

15 In 2012 the 13th September will fall on a Thursday.

What day will the 13th October 2012 fall on?

A Thursday
B Friday
C Saturday
D Sunday
E Monday

16 Sausages costs £7.40 for a kilogram.

How much does 250 grams of sausages cost?

A £1.25   **B** £1.75   **C** £1.95   **D** £1.48   **E** £1.85

17 Roisin goes to karate lessons. It costs her £8.50 each month.

How much in total does she pay for karate in 1 year?

A £85   **B** £102   **C** £101   **D** £25.50   **E** £102.12

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18 The pie chart below shows the favourite colours of 100 children.
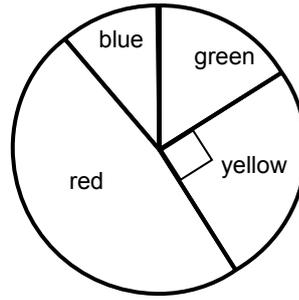
The number of children prefer green is 16. Three times as many children prefer red compared to the number who prefer green.

How many children chose blue as their favourite colour?

A 15 **B** 20 **C** 10 **D** 21 **E** 11

19 Look at the calculation below.

_____ + 428 = 673

What is the missing number that completes the calculation?

A 1101 **B** 245 **C** 1001 **D** 255 **E** 345

20 Look at the calculation below.

9 x _____ = 324

What is the missing number that completes the calculation?

A 2916 **B** 3186 **C** 37 **D** 36 **E** 38

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21 A ballerina spins on a stage. She turns $4 \frac{1}{2}$ times before stopping.

How many degrees has she turned through?

A 1620°   **B** 1440°   **C** 810°   **D** 720°   **E** $1440\frac{1}{2}$°

22 A spider climbs up to the top of a wall and then makes its way back to floor level. The graph below shows the spider's height above floor level at certain times of the day.
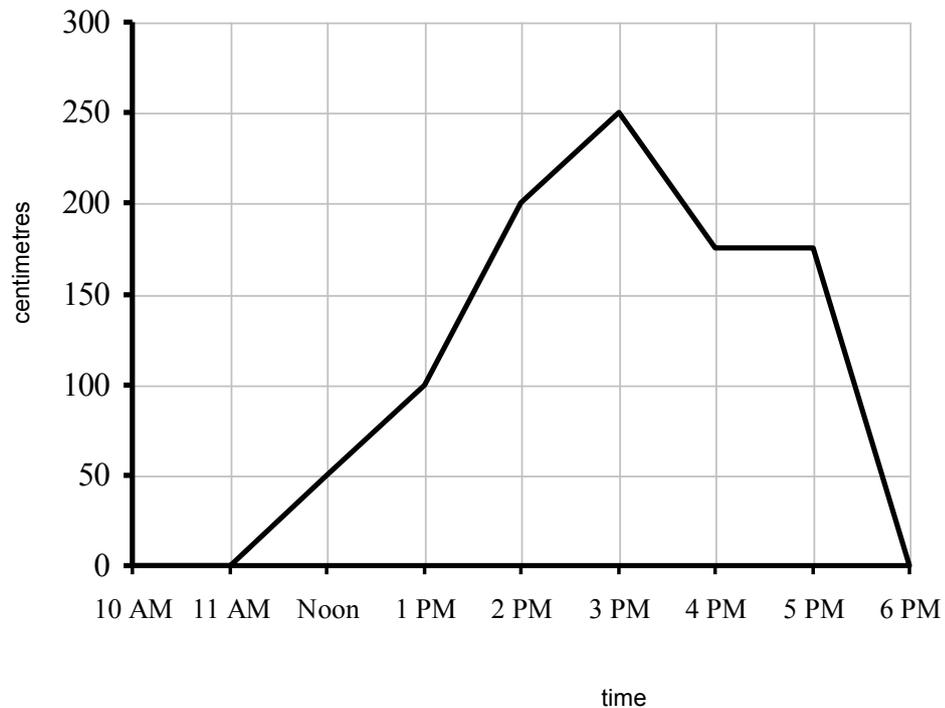

How high has the spider climbed at 15:00?

A 75cm   **B** 2.5m   **C** 25cm   **D** $1\frac{3}{4}$ m   **E** 150cm

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23 In this question you may use the grid below to plot points. In each of the questions below you will be given the coordinates of four points.
By plotting these four points and joining them in order you will be able to draw a quadrilateral.
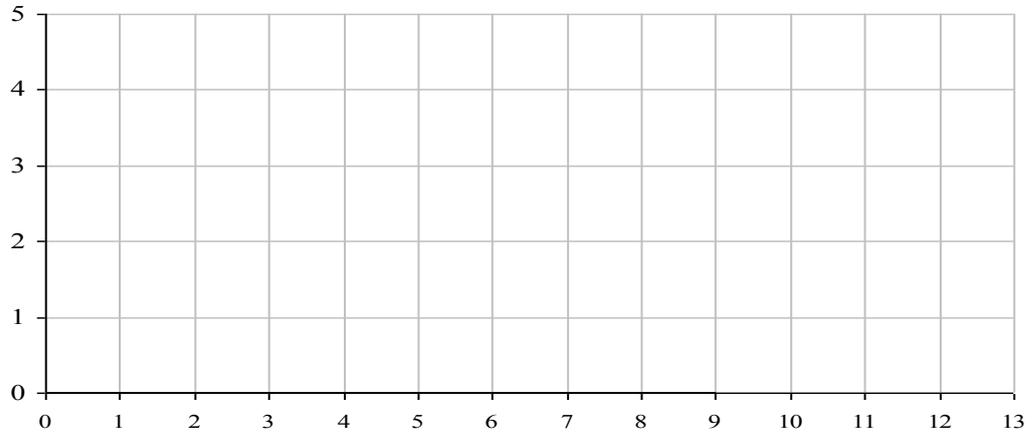
Here are the names of five quadrilaterals:

square   rectangle   parallelogram   kite   trapezium

When you join the coordinates (1,1)   (1,3)   (3,1) and (3,3) it makes a square.

When you join the coordinates (6,2) (11,2) (7,4) and (10,4) which quadrilateral does it make?

A square   **B** rectangle   **C** parallelogram   **D** kite   **E** trapezium

24 **When you join the coordinates (1,5)   (2,3)   (6,3) and (5, 5) which quadrilateral does it make?**

A square   **B** rectangle   **C** parallelogram   **D** kite   **E** trapezium

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25 Look at the sequence of 3 patterns below. In each pattern small triangles are used to make bigger triangles. Each triangle has three sides, and each side is 1cm long.

Pattern 1 has 1 small triangle

Pattern 2 has 4 small triangles

Pattern 3 has 9 small triangles
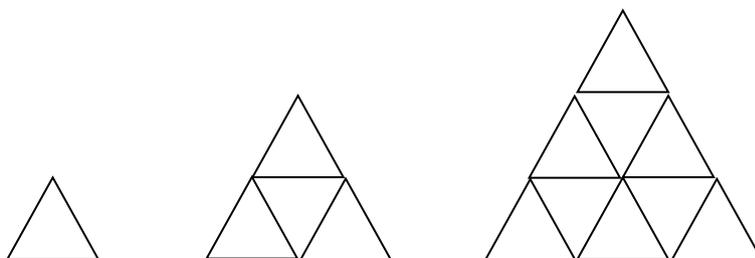
Look at the table below for the number of small triangles in each pattern.

Pattern	1	2	3
Perimeter	3cm	6cm	9cm

What is the perimeter of Pattern 7?

A 49cm   **B** 28cm   **C** 35cm   **D** 21cm   **E** 14cm

26 Catriona and Ella agreed to share the cost of a meal. The meal cost £21.75. Catriona paid $33\frac{1}{3}$% of the cost.

How much did Ella pay?

A £7.25   **B** £14.40   **C** £8.00   **D** £14.50   **E** £7.35

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27 Look at the quadrilateral below.
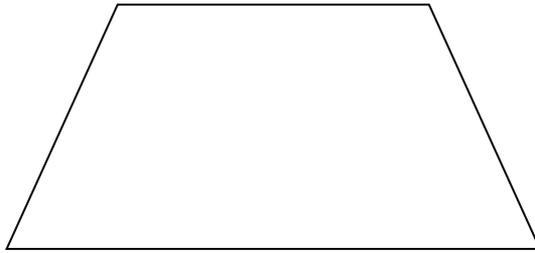
The angles of the quadrilateral are 110°, 113°, 75° and t.

What is the size of the angle t?

A 72°   **B** 142°   **C** 78°   **D** 138°   **E** 62°

28 Heather is planning a party. She buys:

40 streamers at 30 pence each

120 balloons at 10 pence each

60 party poppers at 20 pence each.

What is the total amount Heather will have to pay?

A £18   **B** £36   **C** £24   **D** £28   **E** £32

29 I am facing West.

Through how many degrees must I turn anti-clockwise to face South East?

A 180°   **B** 315°   **C** 135°   **D** 225°   **E** 45°

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30 Look at the 6 cards below. Each has a number on it. These cards are shuffled and placed face down on a table so that the number on each card cannot be seen.

| 15 | 5 | 3 | 25 | 9 | 21 |

Impossible   Unlikely   Even Chance   Likely   Certain
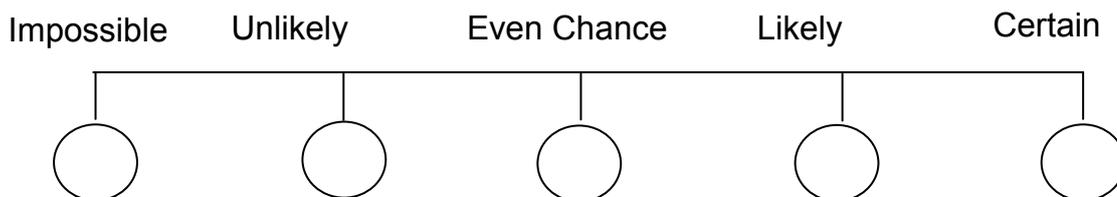
One card is picked at random and turned over.

What are the chances there is an odd number on the card?

A impossible   **B** unlikely   **C** even chance   **D** likely   **E** certain

31 **What are the chances there is a prime number on the card?**

A impossible   **B** unlikely   **C** even chance   **D** likely   **E** certain

32 **What are the chances there is a factor of 30 on the card?**

A impossible   **B** unlikely   **C** even chance   **D** likely   **E** certain

33 **What are the chances there is a multiple of 3 on the card?**

A impossible   **B** unlikely   **C** even chance   **D** likely   **E** certain

34 **What are the chances there is a number less than 1 on the card?**

A impossible   **B** unlikely   **C** even chance   **D** likely   **E** certain

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35 Look at the 8 numbers in the box below.

27	8	20	9
16	64	125	25

Now look at the decision tree below.

```
                    ┌──────────┐
                    │  START   │
                    └────┬─────┘
                         │
                    ┌────▼─────┐
         Yes        │ Is it    │        No
    ┌───────────────│  even?   │───────────────┐
    │               └──────────┘               │
┌───▼──────────────┐              ┌────────────▼─────┐
│ Is it a cube     │              │ Is it a cube     │
│ number?          │              │ number?          │
└──┬────────────┬──┘              └──┬────────────┬──┘
  Yes          No                   Yes          No
   │            │                    │            │
┌──▼──┐     ┌──▼──┐              ┌──▼──┐     ┌──▼──┐
│Box A│     │Box B│              │Box C│     │Box D│
└─────┘     └─────┘              └─────┘     └─────┘
```
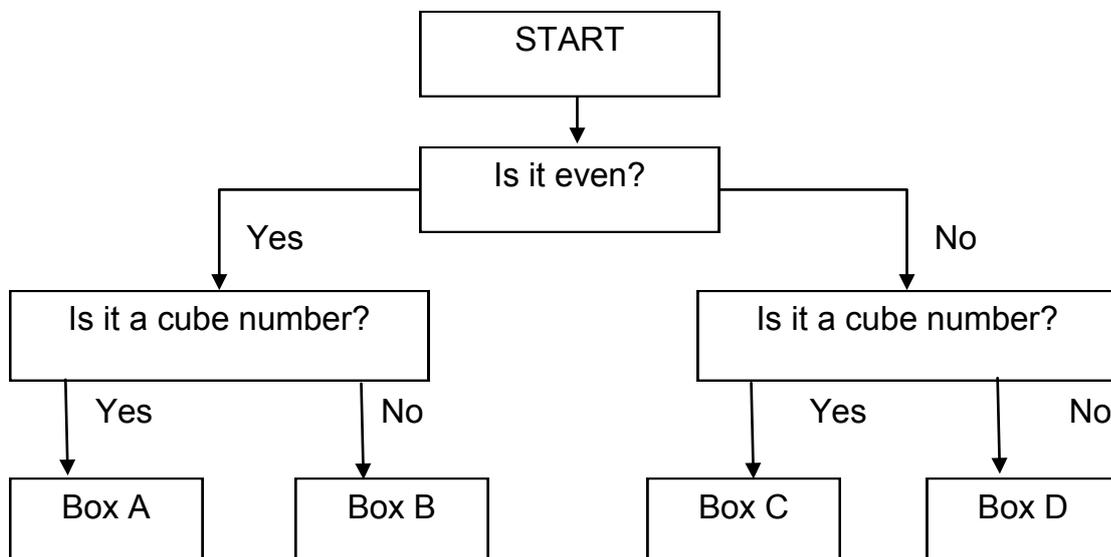
Which numbers belong in Box A?

A 8, 27   **B** 64, 125   **C** 16, 125   **D** 8, 64   **E** 25, 64

36 **Which numbers belong in Box B?**

A 8, 16   **B** 16, 20   **C** 8, 64   **D** 8, 20   **E** 16, 64

37 **Which numbers belong in Box C?**

A 9, 27   **B** 9, 25   **C** 27, 125   **D** 27, 64   **E** 25, 125

38 **Which numbers belong in Box D?**

A 9, 25   **B** 9, 125   **C** 9, 27   **D** 27, 125   **E** 25, 125

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39 Look at the square below. Each of its sides is 4 $^1/_2$ cm long.

4$^1/_2$ cm

4$^1/_2$ cm
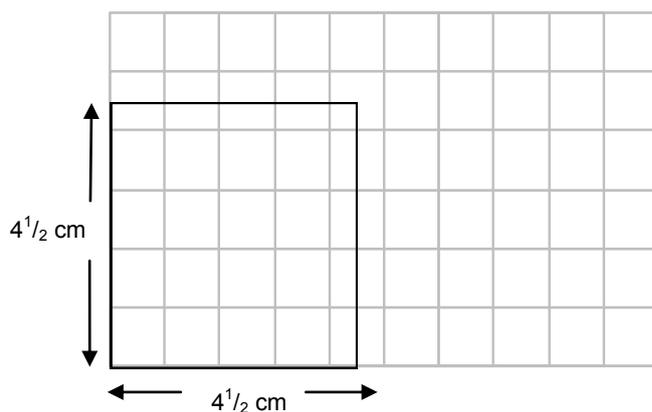
What is the area of the square?

A 20.25cm^2 **B** 16 $^1/_4$ cm2   **C** 45cm^2 **D** 20 $^1/_2$cm^2 **E** 16.4cm^2

40 Karla has to fill glasses with juice from a container. The container holds 3 $^2/_3$ litres of juice. Each glass holds $^1/_4$ litre of juice.

How many full glasses of juice can Karla get from the container?

**A** 11   **B** 12   **C** 13   **D** 14   **E** 15

41 If a = 2, b = 4

a^3 - b = ?

A 4   **B** 2   **C** 19   **D** 12   **E** 10

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42   **What is 10:43 pm as a 24 hour clock time?**

A 20:43   **B** 10:43   **C** 00:43   **D** 22:43   **E** 18:43

43   **8 is what percentage of 24?**

A 25 %   **B** $33\frac{1}{3}$ %   **C** 40 %   **D** 30 %   **E** 20 %

44   A number is made up of 5 tenths, 4 tens and 30 hundreds.
James divides this number by 10.

What decimal number does James get?

A 3040.5   **B** 304.5   **C** 34.05   **D** 34.5   **E** 304.05

45   **What is the cost of 70 cm of ribbon at £3.40 per metre?**

A 34p   **B** £2.38   **C** £2.18   **D** 70p   **E** 48p

END OF TEST

GL MATHS PAPER 6   ANSWER SHEET

1 E	**16** E	**31** B
2 C	**17** B	**32** C
3 A	**18** E	**33** D
4 E	**19** B	**34** A
5 B	**20** D	**35** D
6 C	**21** A	**36** B
7 C	**22** B	**37** C
8 B	**23** E	**38** A
9 C	**24** C	**39** A
10 B	**25** D	**40** D
11 E	**26** D	**41** A
12 D	**27** E	**42** D
13 A	**28** B	**43** B
14 C	**29** C	**44** E
15 C	**30** E	**45** B