# 1 <br> THE ITRAMSEETEST 

## GL <br> Practice Test <br> Maths Paper 4

## Time: 45 minutes

## This test must not be copied.

$$
\begin{aligned}
& x=6 \quad y=7 \quad z=8 \\
& x+y=?
\end{aligned}
$$

A 42
B 1
C 15
D 13
E 56
$2 \quad z^{2}=?$
A 72
B 82
C 10
D 16
E 64

3
Look at the grid below. It is made up of small squares. The side of each small square is 1 cm long. A rectangle is drawn on the grid.


What is the area of the rectangle?
A $24 \mathrm{~cm}^{2}$
B $11 \mathrm{~cm}^{2}$
C $22 \mathrm{~cm}^{2}$
D $23 \mathrm{~cm}^{2}$
E $25 \mathrm{~cm}^{2}$

4
What is the number eleven and three quarters as a decimal number?
A 11.34
B 11.75
C $11^{3} / 4$
D 113.4
E 113.25

5
A number is made up of 4 hundreds, 2 tens and 3 units. Tom divides this number by 10.

What decimal number does Tom get?
A 423
B 405
C 42.3
D 40.5
E 45

The normal price of a bicycle is $£ 140$. In a sale it is reduced by $25 \%$.

How much would you have to pay for it in the sale?
A£115
B £130
C $£ 10$
D £105
E £35

7
$15 \times 99 p=£ 15-$ $\qquad$ p

What is the correct missing number of pence?
A 1p
B 15 p
C $99 p$
D $14 p$
E 59p

Kelly goes on a long journey. Her car uses 8.9 litres of petrol each hour.

If Kelly travels for 6 hours, how many litres of petrol does the car use?
A 54.4 litres
B 52.4 litres
C 9.5 litres
D 14.9 litres
E 53.4 litres


Which of the statements below is true?

A Line $x$ is parallel to line $z$
$B$ Line $y$ is parallel to line $z$
C Line $z$ is perpendicular to line $x$
D Line w is perpendicular to line $y$
$E$ Line $w$ is parallel to line $z$

What is half of $7.2 ?$
A 3.6
B 3.1
C 3.5
D 3.4
E 14.4


What is 7.35 kilograms in grams?

A 0.735 g
B 0.00735 g
C 735 g
D 7350 g
E 73.5 g


The hand on the stopwatch is pointing to 45 .
The hand now moves clockwise through $210^{\circ}$.

What number will the hand be pointing to after turning clockwise through $210^{\circ}$ ?
A 20
B 15
C 25
D 30
E 10

10p
20p
50p
£1
£2

## What is the greatest amount of money I could have in my money box?

A $£ 7.70$
B £21.85
C $£ 10.70$
D $£ 13.70$
E $£ 7.85$ The cuboid below is 10 cm by 8 cm by 5 cm .


How many edges does the cuboid have?
A 400
B 12
C 80
D 40
E 50

15 What is the area of the largest face of the cuboid?
A $400 \mathrm{~cm}^{2}$
B $12 \mathrm{~cm}^{2}$
C $80 \mathrm{~cm}^{2}$
D $40 \mathrm{~cm}^{2}$
E $50 \mathrm{~cm}^{2}$

16
What is the volume of this cuboid?
A $400 \mathrm{~cm}^{3}$
B $12 \mathrm{~cm}^{3}$
C $80 \mathrm{~cm}^{3}$
D $40 \mathrm{~cm}^{3}$
E $50 \mathrm{~cm}^{3}$

17 What is the cost of $\mathbf{2 5} \mathrm{cm}$ of ribbon at $£ 2.40$ per metre?
A $£ 0.80$
B £0.10
C $£ 0.25$
D $£ 0.60$
E £2.15


What is the total length of all the edges of the cuboid?
A 34 cm
B 68cm
C 17 cm
D 160 cm
E 12 cm

19
The cuboid has six faces. What is the area of the face with the smallest area?
A $20 \mathrm{~cm}^{2}$
B $32 \mathrm{~cm}^{2}$
C $40 \mathrm{~cm}^{2}$
D $18 \mathrm{~cm}^{2}$
E $24 \mathrm{~cm}^{2}$

20
The table below shows the times taken by 4 pupils to recite the 7 times tables.

| Pupils | Time (seconds) |
| :---: | :---: |
| Joe | 14 |
| Kevin | 18 |
| Lesley | 17 |
| Carol | 15 |

What is the mean (average) time taken by the 4 pupils?
A 64
B 16
C 11
D 18
E 17

Joan is drawing a Venn diagram. She is putting the whole numbers from 1 to 20 into three sets. Each set is shown as a circle. The factors of 24 are in one circle, the multiples of 4 are in another circle, and the square numbers are in a third circle. Some of the numbers from 1 to 20 are shown on the Venn diagram below.


Which number should Joan put in the section of the Venn diagram indicated by the arrow?
A 2
B 1
C 8
D 4
E 24

22 Normal body temperature is $36.8^{\circ} \mathrm{C}$. Kim was unwell and had a high temperature of $39.1^{\circ} \mathrm{C}$.

How much was her temperature above normal?
A $3.7^{\circ} \mathrm{C}$
B $2.3^{\circ} \mathrm{C}$
C $7.7^{\circ} \mathrm{C}$
D $1.3^{\circ} \mathrm{C}$
E $3.3^{\circ} \mathrm{C}$

23
Look at the function machine below.


What answer does the function machine give when the starting number is $\mathbf{8}$ ?
A 4.5
B 45.5
C 5.5
D 17.5
E 44.5

24
I leave my house at 4:38 pm. There is a bus stop just outside my house. A sign at the bus stop tells me that buses arrive at the bus stop at the times below:

$$
\begin{array}{lllll}
14: 39 & 15: 21 & 16: 32 & 16: 56 & 17: 11
\end{array}
$$

What is the shortest time in minutes I must wait for a bus?
A 1 minute
B 6 minutes
C 18 minutes
D 22 minutes
E 33 minutes

25
The triangle below is isosceles.


What is the value of the angle $x^{\circ}$ ?
A $40^{\circ}$
B $20^{\circ}$
C $110^{\circ}$
D $30^{\circ}$
E $10^{\circ}$

26
Look at the sequence of three patterns below. Each pattern is made up of shaded and unshaded squares. For example, pattern 2 has 4 shaded squares and 8 unshaded squares.

Pattern 1


Pattern 2


Pattern 3


Look at the table below for the number of unshaded squares in each pattern.

| Pattern | 1 | 2 | 3 |
| :--- | :---: | :---: | :---: |
| Unshaded squares | 4 | 8 | 12 |

How many unshaded squares are there in pattern 5 ?
A 20
B 25
C 30
D 15
E 10

27 Look at the table below for the number of shaded squares in each pattern.

| Pattern | 1 | 2 | 3 |
| :--- | :---: | :---: | :---: |
| Shaded squares | 1 | 4 | 9 |

How many shaded squares are there in pattern $\mathbf{6 ?}$
A 24
B 36
C 18
D 30
E 12

28
Fred woke up at 07:15. He spent 25 minutes getting washed and dressed. He then spent a quarter of an hour having his breakfast. When he had finished his breakfast, he walked to school, which took him twenty minutes.

## How long did it take him to get to school?

A 8:15am
B 70 minutes
C 8:20am
D 60 minutes
E 8:05am

29
The temperature in Dublin is $4^{\circ} \mathrm{C}$. The temperature in Edinburgh is $6^{\circ} \mathrm{C}$ lower than in Dublin.

What is the temperature in Edinburgh?
A $10^{\circ} \mathrm{C}$
B $-2^{\circ} \mathrm{C}$
C $2^{\circ} \mathrm{C}$
D $-4^{\circ} \mathrm{C}$
$E 0^{\circ} \mathrm{C}$

30
The temperature in London is $-1^{\circ} \mathrm{C}$. The temperature in Moscow is $5^{\circ} \mathrm{C}$ lower.

What is the temperature in Moscow?
A $4^{\circ} \mathrm{C}$
B $-5^{\circ} \mathrm{C}$
$\mathrm{C}-4^{\circ} \mathrm{C}$
D $6^{\circ} \mathrm{C}$
E-6 ${ }^{\circ} \mathrm{C}$

31
Which fraction below which is nearest in value to $\mathbf{5 0 \%}$ ?
A $1 / 3$
B ${ }^{10} / 25$
C $1 / 5$
D ${ }^{2} / 8$
$E^{1 / 6}$

Bags A, B C, D and E contain coloured sweets. The number of sweets in each bag is:

Bag A
2 orange sweets
5 red sweets
3 yellow sweets

Bag D
5 orange sweets
1 red sweet
3 yellow sweets

Bag B
3 orange sweets
4 red sweets
2 yellow sweets

Bag C
5 orange sweets
2 red sweets
3 yellow sweets

Sean closes his eyes and takes a sweet from each bag.

From which bag is he most likely to choose an orange sweet?
A Bag A
B Bag B
C Bag C
D Bag D
E Bag E

A map has the following scale:
1 centimetre represents 7 kilometres.
The distance between 2 towns on the map is 7.4 cm .

What is the actual distance between the $\mathbf{2}$ towns in kilometres?
A 14.8 km
B 51.8 km
C 49.8 km
D 57.2 km
E 49.2 km

34
Sausages cost £8.40 for a kilogram.

How much does 250 grams of sausages cost?
A£4.20
B $£ 1.68$
C $£ 21$
D $£ 2.10$
E£12.60

35
Two of the five figures below could be the net of a triangular prism.


Which 2 figures that could be nets of triangular prisms?
A 2 and 4
B 4 and 5
C 1 and 3
D 3 and 4
E 2 and 3

36
Look at the quadrilateral below.


The angles of the quadrilateral are $87^{\circ}, 133^{\circ}, 82^{\circ}$ and a.

What is the size of angle $a$ ?
A $158^{\circ}$
B $68^{\circ}$
C $292^{\circ}$
D $302^{\circ}$
E $58^{\circ}$

37
A school provides after school activities, including Computer Club, Gardening Club and Cookery. The Venn diagram below shows the number of pupils who attend these after school activities.


How many pupils attend Gardening Club and Cookery but not

## Computer Club?

A 8
B 26
C 34
D 4
E 24

38
Look at the statements below.

Which of the five statements below are false?

A $1 / 5$ of a complete turn is an acute angle
B $2 / 5$ of a complete turn is an obtuse angle
C $3 / 5$ of a complete turn is more than 3 right angles
D a quarter turn is $90^{\circ}$
$E$ a full turn is $360^{\circ}$

Look at the five rules below.
Rule A Multiply the previous number by 5 , then subtract 2
Rule B Multiply the previous number by 4
Rule C Add 2 to the previous number, then multiply by 2
Rule D Add $\frac{1}{2}$ to the previous number, then multiply by 2
Rule E Add 3 to the previous number

The sequence 4, 7, 10, 13 uses
A Rule A
B Rule B
C Rule C
D Rule D
E Rule E

40 The sequence $4,12,28,60$ uses
A Rule A
B Rule B
C Rule C
D Rule D
E Rule E

## 41

The sequence $3,13,63,313$ uses
A Rule A
B Rule B
C Rule C
D Rule D
E Rule E

42
The sequence $2,5,11,23$ uses
A Rule A
B Rule B
C Rule C
D Rule D
E Rule E

43
The sequence 3, 12, 48, 192 uses
A Rule A
B Rule B
C Rule C
D Rule D
E Rule E

A caramel square weighs 27 grams.
Only $33^{1 /}{ }_{3} \%$ of its weight is caramel.

How many grams of caramel are in $\mathbf{4 0}$ caramel squares?
A 9 g
B 360 g
C 81 g
D 90 g
E 270 g

45
Look at the calculation below.
$6.4 \times 102 \div 100=$ $\qquad$ $?$

What is the missing number that completes the calculation?
A 0.6528
B 6.528
C 65.28
D 0.06528
E 652.8

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

