# THE I TRANGFER TESS 

## Maths <br> Multiple Choice <br> Practice Test Paper 18

## Time: 45 minutes

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 $28 \mathrm{~cm}^{2}$
C $18 \mathrm{~cm}^{2}$
D $27^{1} /{ }_{2} \mathrm{~cm}^{2}$
E $26 \mathrm{~cm}^{2}$

2
Look at the cuboid below.


HIJK is a square. The length of the line HL is 6 cm .
The volume of the cuboid is $54 \mathrm{~cm}^{3}$.

What is the length of the line IJ?
A 1 cm
B 2 cm
C 3 cm
D 4 cm
E 5 cm

Peter's car has run out of petrol. The petrol tank on Peter's car holds 70 litres of petrol. Petrol costs $£ 1.36$ a litre.

How much does it cost Peter to fill the tank with petrol?
A £91.20
B £95.27
C £102.40
D £95.20
E $£ 75.20$

4
Look at the calculation below.
$4.2 \times 101 \div 100=?$

Which number completes the calculation?
A 0.04242
B 42.42
C 0.4242
D 4.242
E 424.2

5 Look at the sequence of numbers below.
$\qquad$ , 92, 98, 107, 119, 134

What missing number completes the sequence?
A 89
B 90
C 88
D 91
E 87

## 6 <br> A map has the following scale:

1 centimetre represents 7 kilometres.

The distance between 2 towns on the map is 4.3 cm .

What is the actual distance between the $\mathbf{2}$ towns in kilometres?
A 8.6 km
B 30.1 km
C 29.2 km
D 28.1 km
E 23.1 km

7
Look at the statement below.

40 is $\qquad$ \% of 200

There is a missing number.

What number makes the statement true?
A 15
B 30
C 20
D 35
E 25

8
Orlagh leaves home at 12:10 pm and cycles at a steady speed to the shop. The shop is 2 kilometres from her home. Orlagh arrives at the shop at 12:20 pm.

How many metres does Orlagh cycle in one minute?
A 5 m
B 20 m
C 200 m
D 10 m
E 100 m

# 9 <br> On a winter day, the temperature in Roisin's house is $17^{\circ} \mathrm{C}$. The temperature in her garden is $22^{\circ} \mathrm{C}$ lower. 

What is the temperature in the garden?
A $6^{\circ} \mathrm{C}$
B $-6^{\circ} \mathrm{C}$
C $5^{\circ} \mathrm{C}$
D $-39^{\circ} \mathrm{C}$
$\mathrm{E}-5^{\circ} \mathrm{C}$

A square number can be added to a prime number to make 39.
There are two ways of doing this. One of the ways is given below:
$16+13=39$

What other square number can be added to a prime number to give 39 ?
A $8+31$
B $4+35$
C $9+30$
D $3+36$
E $14+25$

Look at the two numbers below.

### 0.23 <br> 0.3

What number do you get when you multiply the larger of the two numbers by 100?
A 30
B 23
C 3
D 230
E 2.3

The diagram below shows a triangle.
This triangle is to be reflected in the dotted mirror line. The dotted line passes through the point with co-ordinates $(10,0)$ and is parallel to the $y$ axis. Each of the 3 vertices of the triangle is reflected to give 3 new points. These are joined to form a new triangle.
y

$(10,0)$

The table below shows the co-ordinates of the vertices of both triangles.

| Vertex | Reflected vertex |
| :---: | :---: |
| $(8,9)$ | $(12,9)$ |
| $(6,6)$ | $(14,6)$ |
| $(7,3)$ | $?$ |

What are the missing coordinates?
A (10,3)
B $(13,6)$
C $(13,3)$
D (10,6)
E (12,3)

I leave the house at $7: 32 \mathrm{pm}$. 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:
$\begin{array}{lllll}17: 41 & 18: 01 & 19: 31 & 19: 46 & 20: 11\end{array}$

## What is the shortest time I must wait for a bus?

A 9 minutes
B 1 minute
C 29 minutes
D 14 minutes
E 21 minutes
14
Kerry uses her calculator to carry out the calculation:
$256 \times 1.9=486.4$

Which calculation below also gives the answer 486.4?

A $\quad 0.19 \times 25.6$
B $\quad 25.6 \times 190$
C $\quad 190 \times 2.56$
D $256 \times 19$
E $\quad 0.19 \times 256$

15 Which of the five fractions below is the smallest?
$A^{2 / 3}$
$B^{7 / 12}$
C ${ }^{3} / 4$
D ${ }^{17} / 24$
$E^{5} / 6$

Look at the quadrilateral below.


The angles of the quadrilateral are $111^{\circ}, 113^{\circ}, 71^{\circ}$ and $r$.

## What is the size of the angle $r$ ?

A $145^{\circ}$
B $75^{\circ}$
C $65^{\circ}$
D $295^{\circ}$
E $135^{\circ}$

17I have saved 21 coins in my money box. My money box contains at least 3 of each of the following coins:
$2 p$
5p
10p
20p
50p
£1

What is the greatest amount of money I could have in my money box?
A £8.67
B $£ 11.61$
C $£ 5.67$
D $£ 5.61$
E £8.61
$? \div 9=6.3$

What is the missing number in the calculation above?
A 0.7
B 56.7
C 61.2
D 54.7
E 7.0
nineteen and one tenth written as a decimal is 19.1

What is thirty two and one fifth written as a decimal?
A 30.25
B 32.15
C 32.5
D 30.2
E 32.2

20
What is three and three quarters written as a decimal?
A 3.75
B 3.25
C 33.25
D 33.75
E 3.34

21
What is seventeen tenths written as a decimal?
A 1.7
B $\boldsymbol{1}^{1 / 7}$
C 0.17
D 0.017
E ${ }^{1 / 7}$

22
Look at the calculation below.
$2845.1 \div 100=?$

Which number completes the calculation?
A 28.451
B 0.28451
C 2.8451
D 284.51
E 28.0451

23
A party planner pays for:

25 party poppers at 30 pence each
130 balloons at 5 pence each
4 cakes at $£ 3.50$ each

What is the total amount the party planner will have to pay?
A£27
B £24
C £25
D £28
E £26

24
Elaine is visiting a friend. She spent 25 minutes walking to the bus stop from her home. She then spent three quarters of an hour waiting at the bus stop. The bus journey lasted for $1 \frac{1}{2}$ hours. She then walked for 25 minutes from the bus station to her friend's house.

How long did it take Elaine in total to get from her home to her friend's house?

A 1 hours and 85 minutes
B 2 hours and 55 minutes
C 1 hours and 75 minutes
D 2 hours and 45 minutes
E 3 hours and 5 minutes

Sara is drawing a Venn diagram. She is putting the whole numbers from 1 to 10 into three sets. Each set is shown as a circle. The cube numbers are in one circle, the square numbers are in another circle, and the factors of 12 are in a third circle. Some of the numbers from 1 to 10 are shown on the Venn diagram below.

Cube numbers Square numbers


Which numbers should Sara put outside the Venn diagram?
A $2,4,5$
B 3, 7, 9
C 5, 7, 10
D 3, 7, 10
E 2, 5, 6

26
Mince steak costs $£ 5.20$ for a kilogram.

How much does $\mathbf{7 5 0}$ grams of mince steak cost?
A£1.30
B $£ 3.15$
C $£ 1.05$
D $£ 3.05$
E £3.90

27
Look at the sequence of 3 patterns below. In each pattern small triangles are used to make bigger triangles.

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 |
| :--- | :--- | :--- | :--- |
| Number of small triangles | 1 | 4 | 9 |

How many small triangles will there be in Pattern 11?
A 22
B 121
C 132
D 110
E 111

28
A scarf costs $£ 12.00$. It is reduced in price by $40 \%$ in a sale.

What is the price of the scarf in the sale?
A $£ 3.00$
B $£ 4.80$
C $£ 9.00$
D $£ 7.20$
E £8.80

29
Look at the cuboid below. Its dimensions are 8 cm by 3 cm by 7 cm .


What is the total length of all the edges of the cuboid?
A 168 cm
B 36 cm
C 72 cm
D 52 cm
E 148 cm

30 What is the area of the face with the largest area?
A $56 \mathrm{~cm}^{2}$
B $24 \mathrm{~cm}^{2}$
C $21 \mathrm{~cm}^{2}$
D $63 \mathrm{~cm}^{2}$
E $48 \mathrm{~cm}^{2}$

31
Look at the menu below.

| MENU |
| :---: |
| Curry $\ldots \ldots \ldots \ldots . £ 3.25$ |
| Rice $\ldots \ldots \ldots \ldots . . £ 1.80$ |

What is the cost of 2 curries and 3 portions of rice?
A£10.05
B£11.90
C $£ 11.80$
D $£ 9.90$
E £9.80

Which is the true statement?

A $1 / 5$ of a complete turn is an obtuse angle
B ${ }^{3} / 5$ of a complete turn is a reflex angle
C $4 / 5$ of a complete turn is less than 3 right angles
D $180^{\circ}$ is a right angle
$E^{1 / 6}$ of a complete turn is an obtuse angle

33 Which percentage is the same as $4 / 5$ ?
A 90\%
B 45\%
C 54\%
D 80\%
E 85\%

34 Which percentage is the same as ${ }^{2} / 3$ ?
A $66{ }^{2} / 3 \%$
B 23\%
C 32\%
D $33 \frac{1}{1} 3 \%$
E 30\%

35
Which percentage is the same as ${ }^{3} / 4$ ?
A 34\%
B $43 \%$
C 75\%
D 30\%
E 40\%

Simon is bird spotting. He is carrying out a survey about the birds he sees in a park. He sees 60 birds altogether. The birds are shown in the table below.

|  | sparrows | starlings | crows | magpies | swifts |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Number of... | 5 | 10 | 20 | 15 | 10 |

Simon then uses the table to draw the pie chart below.


Starting with swifts and going clockwise, what order are the birds in the pie chart?

A swifts, magpies, crows, starlings, sparrows
B swifts, crows, magpies, starlings, sparrows
C swifts, magpies, starlings, crows, sparrows
D swifts, magpies, starlings, sparrows, crows
E swifts, magpies, sparrows, crows, starlings


## What is the area of the shaded part of the square tile?

A $12.25 \mathrm{~cm}^{2}$
B $49 \mathrm{~cm}^{2}$
C $21 \mathrm{~cm}^{2}$
D $36.75 \mathrm{~cm}^{2}$
E $28 \mathrm{~cm}^{2}$

38
Sweets costs $£ 3.70$ per kilogram.

How much would 700 g cost?
A $£ 2.59$
B £2.19
C $£ 2.89$
D $£ 2.79$
E £2.09

39
Look at the grid below.


Plot the points $(2,8),(7,8)$ and $(7,4)$ on the grid.
When a fourth point is added to the grid, the four points can be joined to form a rectangle.

What are the coordinates of the fourth point that forms a rectangle?
A (4,2)
B $(2,4)$
C $(2,8)$
D $(2,5)$
$E(5,2)$

40
An cyclist takes 12 minutes to cycle 4000 metres at a steady speed.

How long would he take to cycle $\frac{1}{2}$ kilometre at the same steady speed?
A 2 minutes
B 5 minutes
C 15 minutes
D 3 minutes
E $1^{\frac{1}{1}}$ 2 minutes


How many faces does the cuboid have?
A 5
B 6
C 12
D 8
E 4

42
How many edges does the cuboid have?
A 6
B 10
C 4
D 12
E 8

43
How many vertices does the cuboid have?
A 8
B 4
C 12
D 10
E 6

44
2 litres of orange juice costs $£ 2.56$.

What is the cost of 500 ml of orange juice?
A£1.28
B $£ 0.64$
C $£ 0.14$
D $£ 1.23$
E £6.40

45 What is the cost of orange juice per litre?
A $£ 2.56$
B £1.28
C $£ 0.28$
D £2.46
E£12.80

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

