READ THESE INSTRUCTIONS FIRST

Write your Centre number, candidate number and name in the spaces at the top of this page. Write in dark blue or black pen.

DO NOT WRITE IN ANY BARCODES.

Answer all questions.

The number of marks is given in brackets [ ] at the end of each question or part question. You should show all your working in the booklet. The total number of marks for this paper is 40.
Here is a thermometer. The arrow is pointing to 10°C.

Draw an arrow on the thermometer pointing to -1°C.
2  John-Paul has 6 number cards.

```
3  4  5  6  7  8
```

Use each card **only once** to complete these statements.

```
□  □ = a multiple of 10
□  □ = a number between 40 and 45
□  □ = a multiple of 6
```

3  Here are three fractions.

```
1
2

1
4

1
10
```

Write each fraction in the correct box on the number line.

```
0

□  □  □
```

[2] 2

[1]
Here are five number discs.

3  4  5  6  7

Use each disc once to complete the cross pattern.
The total going across must be the same as the total going down.
5 Here is a rectangle. It is twice as long as it is wide.

What is the perimeter of the rectangle?

........................................................................................................................................ cm [1]

6 Here are four digit cards.

2 3 4 5

Anna chooses three of these cards to write three-digit numbers.

Write all the three-digit numbers that Anna could make between 350 and 450.

........................................................................................................................................ [2]
Fatima asked the students in her class which fruits they enjoy eating.

The Venn diagram shows the results of her survey.

(a) How many students enjoy both mangoes and pineapples?

........................................................................................................... [1] 

(b) How many students took part in the survey?

........................................................................................................... [1] 

8 Here is a shape.

How many of the inside angles of the shape are right angles?

9 Put these numbers in order starting with the largest.

340  -620  380  -93  -175

largest  smallest  [1]

10 Write the same number in both boxes to make this calculation correct.

\[ \square \times \square = 64 \]

[1]
11 AB is a straight line.

![Diagram](image)

Calculate the size of angle $x$.
Do not use a protractor (angle measurer).

12 What is the missing number?

\[
\boxed{\_} + 5 = 24
\]

13 Here are four statements about odd and even numbers. One statement must be wrong.

Put a cross (×) in the box by the **wrong** statement.

- The sum of three even numbers is 16
- The sum of three odd numbers is 20
- The sum of two odd numbers is 10
- The sum of two even numbers is 18

[1]
14  (a) Write this mixed number as an improper fraction.

\[
\frac{5}{4} = \underline{\hspace{2cm}}
\]

[1]

(b) Write this improper fraction as a mixed number.

\[
\frac{17}{5} = \underline{\hspace{2cm}}
\]

[1]

15  Here are 7 numbers.
Put a ring around three numbers that add up to 200.

\[
2 \quad 4 \quad 8 \quad 16 \quad 32 \quad 64 \quad 128
\]

[1]

16  Look at these four calculations.
One is wrong.

\[
9.5 \times 3 = 28.5 \quad 3.9 \times 9 = 35.1 \quad 2.6 \times 4 = 12.4 \quad 4.2 \times 6 = 25.2
\]

Put a cross (×) through the incorrect calculation.

[1]
17 Here are four fractions.

\[
\begin{array}{cccc}
\frac{1}{50} & \frac{50}{100} & \frac{100}{50} & \frac{1}{5}
\end{array}
\]

Which fraction is equivalent to 0.5? [1]

18 Here is a scale showing the mass of a bunch of bananas.

What is the mass of the bananas? [1]
Anna goes to see a film. The digital clock shows the time the film starts.

18:15

The film ends at 8:50 pm.

How long does the film last?

---

Here is a sequence of numbers.

Write the missing number in each box.

81, 64, [ ], 36, 25, [ ] 9

---
A glass holds 225 millilitres of water.

Peter drinks 1.8 litres of water during a day.

How many glasses of water does he drink during the day?

Lewis is 0.9 metres tall.
Tim is 0.15 metres taller than Lewis.

How tall is Tim?
23 Here is a triangle on a square grid.
The triangle is translated so that point A moves to point B.

Draw the triangle at its new location.

24 Use the digits 3, 5 and 6 only to complete this calculation.
You can use each digit more than once.

\[
\begin{array}{ccc}
\phantom{5} & \phantom{5} & \phantom{5} \\
\phantom{3} & \phantom{3} & \phantom{3} \\
\phantom{6} & \phantom{6} & \phantom{6} \\
\end{array}
+ \begin{array}{ccc}
\phantom{5} & \phantom{5} & \phantom{5} \\
\phantom{3} & \phantom{3} & \phantom{3} \\
\phantom{6} & \phantom{6} & \phantom{6} \\
\end{array}
= 1000
\]
25. Complete the following.

\[ 35 \times 16 = 70 \times \square \]

[1]

26. Here are four digit cards.

\[ \begin{array}{cccc}
3 & 5 & 4 & 6 \\
\end{array} \]

Use each of these cards to make a total that is a multiple of 5. Each card must only be used once.

\[ \square + \square \]

[1]

27. What is \( \frac{7}{10} \) of 650?
28 The graph shows Hakim's cycle journey between 1 pm and 5 pm.

(a) How far does he travel between 1 pm and 3 pm?

.................................................. km [1] |

(b) What might he be doing between 3 pm and 4 pm?

........................................................................................................................................................................................................... [1] |

29 William makes a sequence of five numbers.
The first number is 2.
The last number is 14.
His rule is to add the same number each time.
Write in the missing numbers.

2


14

[2]
30 Choose three different prime numbers to make this calculation correct.

\[
\text{ } + \text{ } + \text{ } = 10
\]

[1]

31 Circle the quadrilateral which has only one pair of opposite parallel sides.

parallelogram kite rhombus trapezium

[1]

32 Here are four digit cards.

\[
\begin{array}{cccc}
3 & 4 & 5 & 6 \\
\end{array}
\]

Use each digit card once to make the number nearest to 4000.

\[
\begin{array}{cccc}
\text{ } & \text{ } & \text{ } & \text{ } \\
\end{array}
\]

[1]
Victoria has 2 boxes.

One box is three times heavier than the other. The total mass is 500 grams.

What is the mass of each box?

____________________ grams and _________________ grams