

CANDIDATE
NAME

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CENTRE
NUMBER

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CANDIDATE
NUMBER

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* 5 5 7 6 8 3 5 0 1 9 *



MATHEMATICS

0845/02

Paper 2

April 2019

45 minutes

Candidates answer on the Question Paper.

Additional Materials:

Pen
Pencil
Ruler

Protractor
Calculator
Tracing paper (optional)

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.

Calculator allowed.

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.

This document consists of **16** printed pages.

- 1 Draw an arrow (\downarrow) to show the position of the number 340 on the number line.



[1]

- 2 In a fun run adults wear **odd** numbers and children wear **even** numbers.


Write whether each number belongs to an adult or a child.

One has been done for you.

| | | | | |
|----------------|-------|-------|-------|-------|
| 426 | 371 | 469 | 770 | 432 |
| child | | | | |

[1]

- 3  represents a number

 represents a different number

$$\text{circle} + \text{circle} + \text{circle} = 15$$

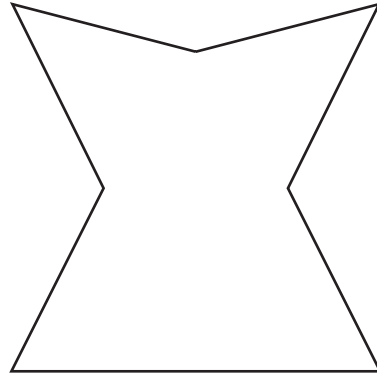
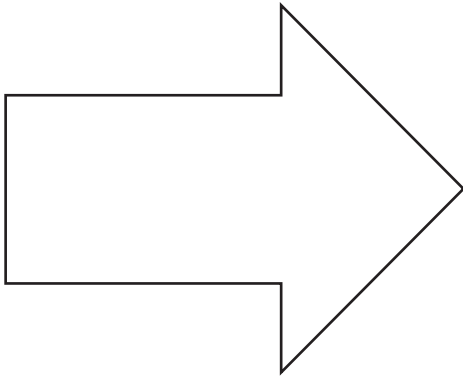
$$\text{star} + \text{star} + \text{star} + \text{star} = 24$$

Complete the statement.

$$\text{circle} + \text{star} + \text{star} = \text{.....}$$

[1]

4 Draw a line of symmetry in each of these shapes.



[1]

5 Three friends share a pack of 50 pens equally.

How many pens will be left over?

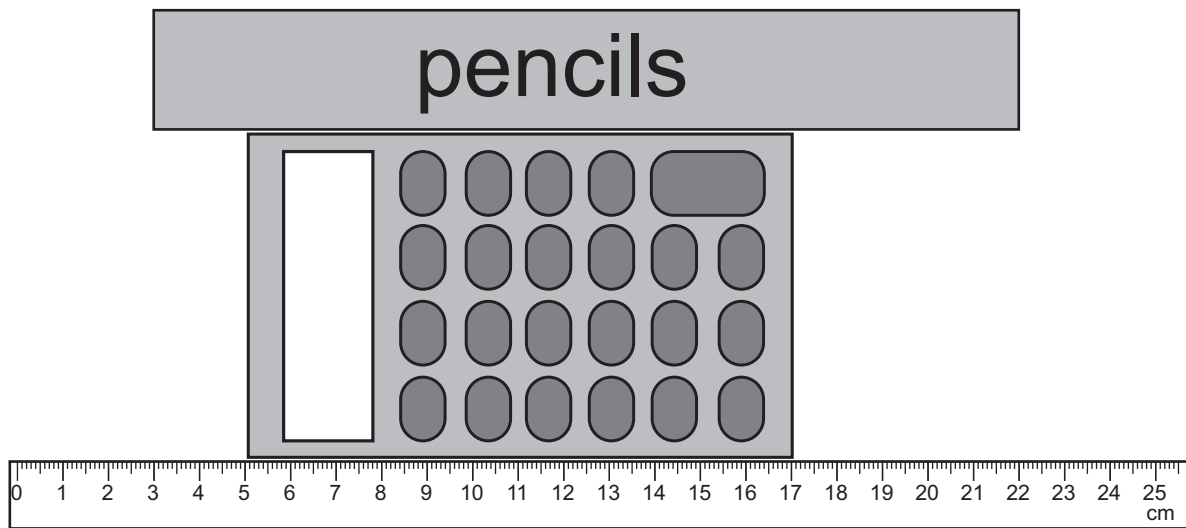
.....pens [1]

6 Lily makes \$6.35 using only 5 cent coins.

How many 5 cent coins does she need?

.....coins [1]

- 7 The diagram shows a calculator and a pencil case placed next to a ruler.



Use the scale on this ruler to complete the sentences.

- (a) The calculator is cm long.

[1]

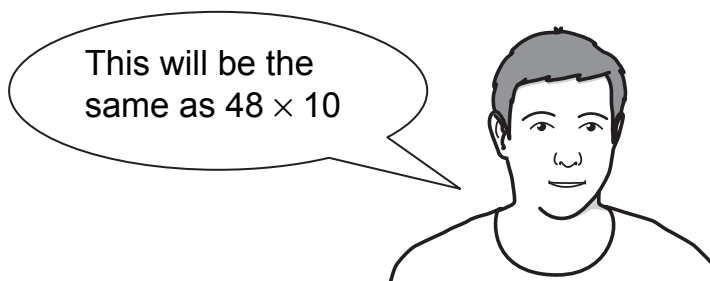
- (b) The pencil case is cm longer than the calculator.

[1]

- 8 Carlos wants to calculate this multiplication mentally.

$$6 \times 5 \times 8 \times 2$$

He says,

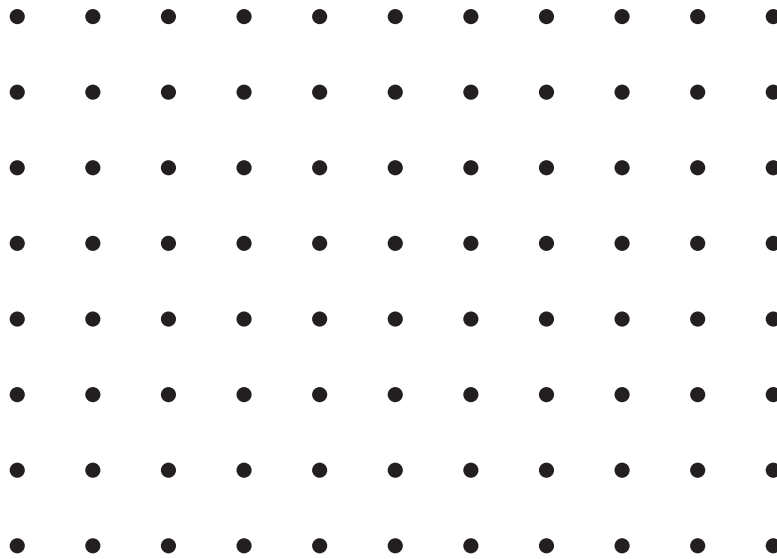


Explain how he knows.

..... [1]

9 Here is a 1 cm grid.

Use the dots to make a rectangle with a perimeter of 18 cm.



[1]

10 Here are four digit cards.



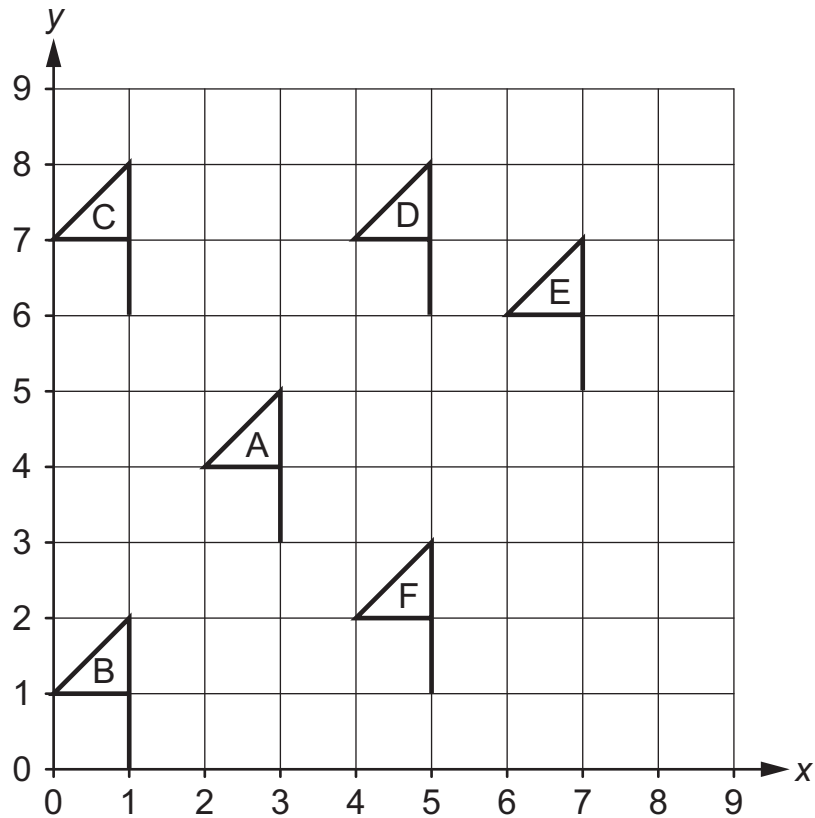
Use each card **once** to make these statements correct.

$$\frac{1}{\square} = \frac{\square}{8}$$

$$\frac{\square}{3} = \frac{2}{\square}$$

[1]

11 Here are some shapes drawn on a co-ordinate grid.



Shape A is translated 2 left and 3 up.

Which shape shows its new position?

..... [1]

12 Complete this number sentence.

$$\begin{array}{|c|c|} \hline & \\ \hline \end{array} \times \begin{array}{|c|c|} \hline & 3 \\ \hline \end{array} = 391$$

[1]

13 Six teams take part in a football competition.

The table shows how many games each team wins, draws and loses.

| Team | Win | Draw | Lose | Points |
|----------|-----|------|------|--------|
| Durford | 40 | 3 | 17 | 83 |
| Warham | 37 | 5 | 18 | |
| Carsea | 39 | 5 | 16 | |
| Londis | 8 | 2 | 50 | 18 |
| Robridge | 12 | 3 | 45 | 27 |
| Oxton | 33 | 4 | 23 | |

Each team scores

- two points for a win
- one point for a draw
- no points for a loss

(a) Complete the points column.

[1]

(b) Which team loses twenty seven games less than Robridge?

..... [1]

14 Write these numbers in order starting with the smallest.

$$\frac{3}{10}$$

0.04

$$\frac{1}{2}$$

20%

5%

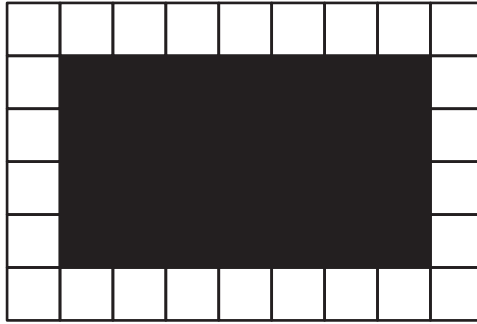
.....

smallest

largest

[2]

15 Here is a picture of a shaded shape drawn on a grid of centimetre squares.



Not drawn to
scale

What is the area of the shaded shape?

.....cm² [1]

16 The cost for parking at a city airport is shown in the table.

| | |
|--|---------|
| Price for first day | \$16.60 |
| For every $\frac{1}{2}$ day afterwards | \$9 |

Yuri pays \$124.60 to park his car.

How many days does he park his car for?

Show your working.

..... days [2]

17 Some children go on a bike ride.

The table shows the distances they cycle.

| | |
|--------|---------|
| Safia | 5.63 km |
| Aiko | 5.36 km |
| Rajiv | 5.06 km |
| Hassan | 5.3 km |

Write the name of each child in the correct place.

One has been done for you.

| Distance cycled | | | |
|-----------------|--|--|----------|
| Safia | | | |
| longest | | | shortest |

[1]

18 Here are some statements.

Write the word **true** or **false** next to each statement.

| | True or False |
|--------------------------------------|---------------|
| There are 188 hours in a week. | |
| There are 900 seconds in 15 minutes. | |
| There are 744 hours in May. | |
| There are 578 months in 49 years. | |

[2]

- 19 Here is a picture of a fair 6-sided dice.
It has the numbers 1 to 6 on it.



The dice is thrown.

Draw lines to show how likely these outcomes are.

| Outcomes | Likelihood |
|-----------------------|-------------|
| it is 1 or more | impossible |
| it is less than 5 | unlikely |
| it has a factor of 2 | even chance |
| it is a square number | likely |
| | certain |

[2]

- 20 (a) What is the largest multiple of **both** 4 and 5 that is less than 50?

..... [1]

- (b) What is the smallest multiple of **both** 3 and 4 that is greater than 50?

..... [1]

21 Ahmed sleeps for 8 hours.

What fraction of a day does he sleep for?

Write the answer in its simplest form.

..... [1]

22 Here is a table of test results.

It shows Mia's test scores out of one hundred in each subject.

| Mia's Test Results | |
|---------------------------|----|
| Maths | 90 |
| Writing | 63 |
| Spelling | 55 |
| Science | 75 |
| History | 57 |

(a) In which subject is her median score?

..... [1]

(b) What is her mean score?

..... [1]

23 Angelique buys a box of 50 oranges.

$\frac{3}{10}$ of the oranges are damaged.

How many oranges are damaged?

..... oranges [1]

24 Write a different whole number in each box to make the calculation correct.

$$\boxed{} \times \boxed{} = 370 + 37$$

[1]

25 30 000 people visit a museum.

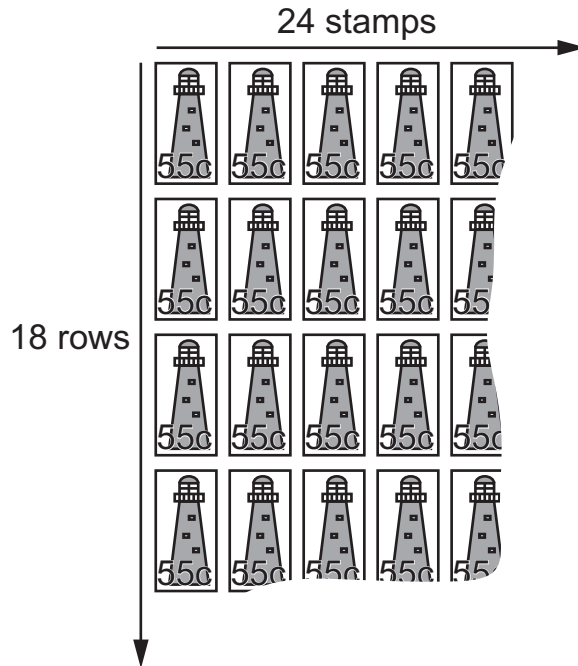
30% are women, 25% are men and the rest are children.

How many **children** visit the museum?

..... children [2]

26 A sheet of stamps has 18 rows.

There are 24 stamps in each row.



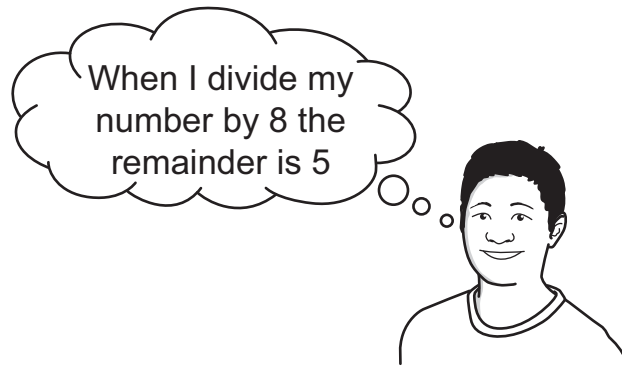
The stamps cost 55 cents each.

What is the value of the whole sheet of stamps?

Give units with your answer.

..... [2]

27 Oliver is thinking of a two-digit number.



What is the **largest** two-digit number Oliver could be thinking of?

..... [1]

28 Here is part of a number square.

| | | | | |
|----|----|----|----|----|
| 31 | 32 | 33 | 34 | 35 |
| 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 |
| 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 |
| 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 |
| 66 | 67 | 68 | 69 | 70 |

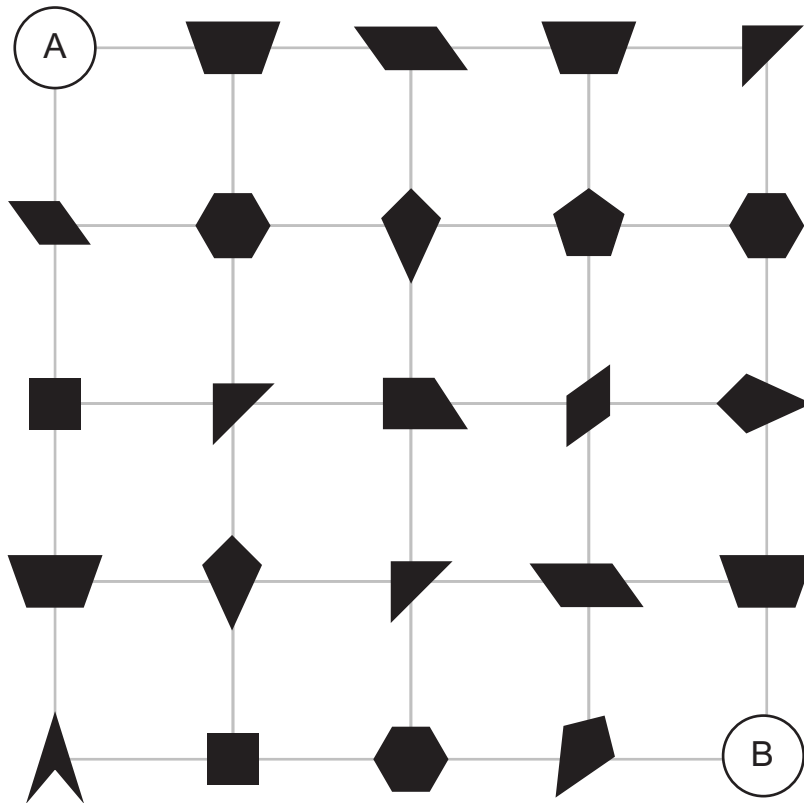
Youssef is thinking of a prime number between 31 and 70

It is one less than a multiple of ten.

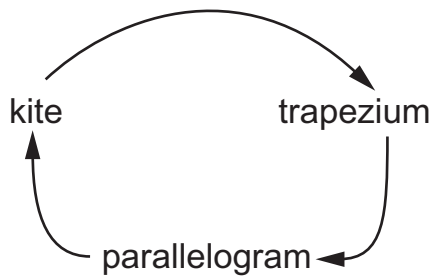
What is Youssef's prime number?

..... [1]

29 Here is a network of shapes.



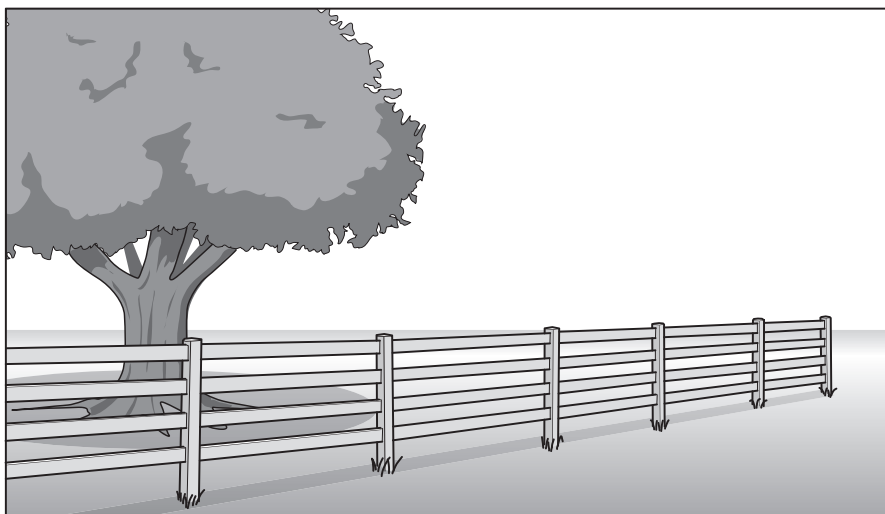
Draw a path from A to B through the network following the repeating rule.



Do not move diagonally.

[1]

30 A farmer is building a fence.



The fence posts are always the same distance apart.
The distance between the first post and third post is 3 metres.

What is the distance between the first post and fourth post?

.....metres [1]

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