Cambridge Primary Checkpoint

CANDIDATE NAME

CENTRE NUMBER

CANDIDATE NUMBER

MATHEMATICS **0845/02**

Paper 2 **October 2021**

45 minutes

You must answer on the question paper.

You will need: Protractor
Tracing paper (optional)

INSTRUCTIONS

- Answer **all** questions.
- Use a black or dark blue pen. You may use an HB pencil for any diagrams or graphs.
- Write your name, centre number and candidate number in the boxes at the top of the page.
- Write your answer to each question in the space provided.
- Do **not** use an erasable pen or correction fluid.
- Do **not** write on any bar codes.
- You should show all your working in the booklet.
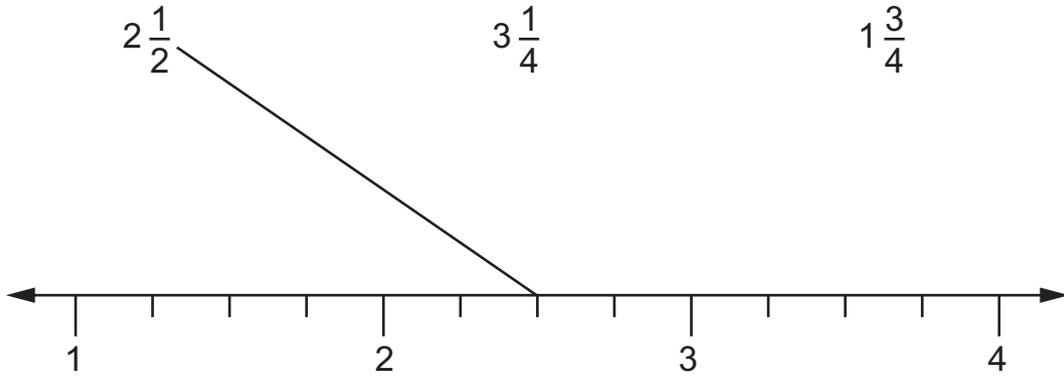- You may use a calculator.

INFORMATION

- The total mark for this paper is 40.
- The number of marks for each question or part question is shown in brackets [ ].

This document has **16** pages.

[Turn over

1 Here is part of a number line.

Draw a line to join each mixed number to the correct place on the line.
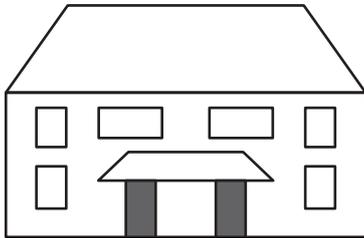
The first one has been done for you.

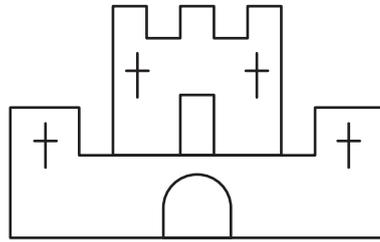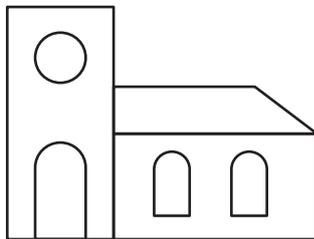$2\frac{1}{2}$ $3\frac{1}{4}$ $1\frac{3}{4}$

[1]

2 Here are four pictures of buildings.

Tick (✓) the pictures that have a line of symmetry.

[1]

3 Eva says,

> Multiples of 3 always end in 3, 6 or 9
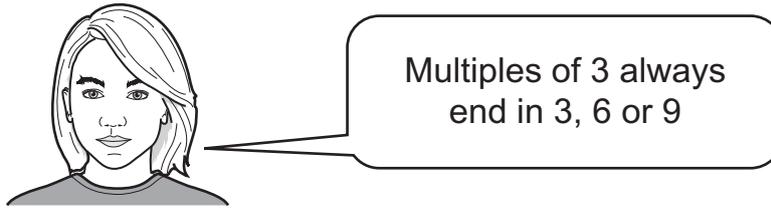
Is she correct?

Yes ☐   No ☐

Give an example to explain your answer.

....

.... [1]

4 Here are some statements about odd and even numbers.
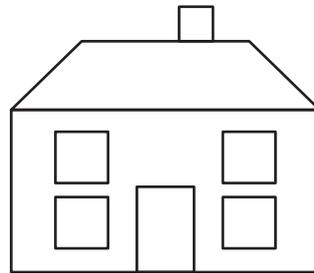
Join each statement to its correct answer.

The first one has been done for you.

odd + odd

odd + odd – even

odd

even – odd + even   even

even – odd – odd

odd – even – even
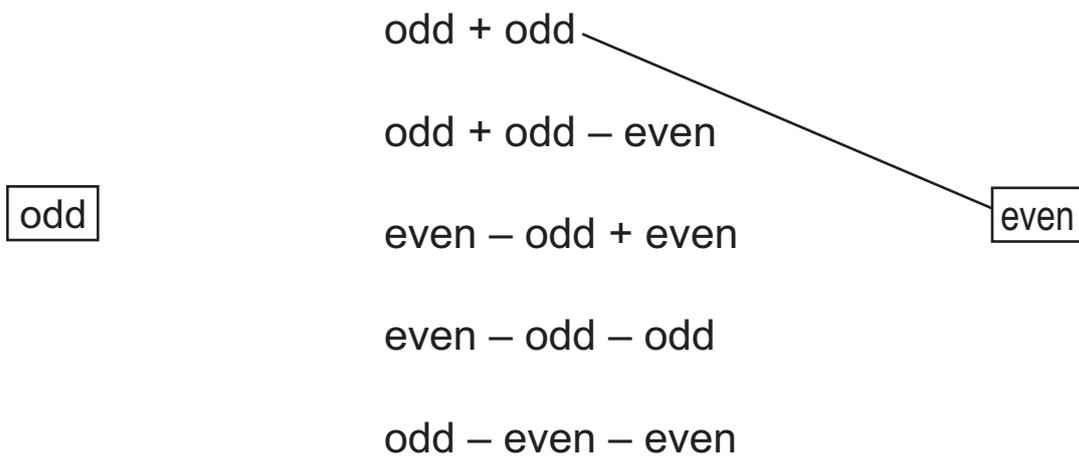
[2]

5 Here is a page from a calendar.

March						
M	T	W	T	F	S	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

A chess club meets on the **third** Saturday of every month.

Write the date of the meeting in **April**.

....April   [1]

6 Lily subtracts 56 from 92
She explains her method by writing:

92 − 56 = [92] (−) [50] (−) [6]

Lily subtracts 298 from 406

Complete her explanation.
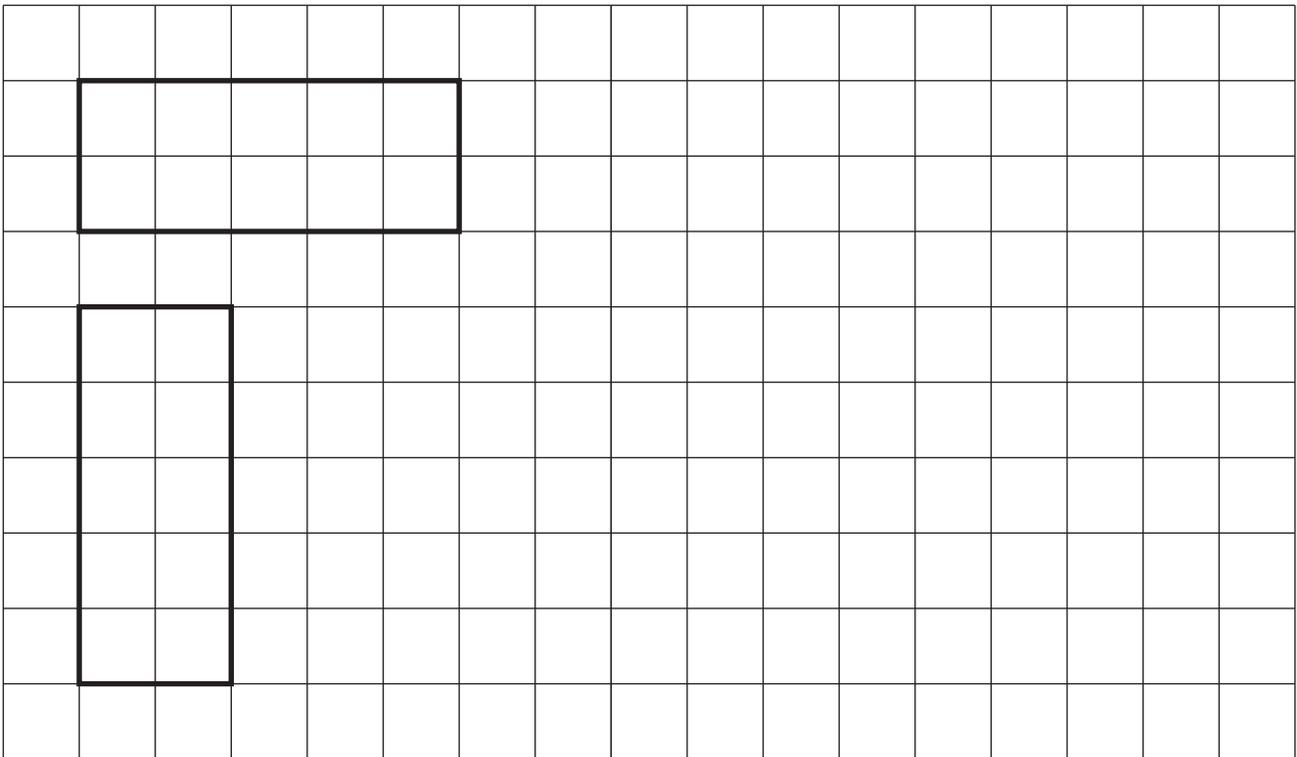
406 − 298 = [406] (−) [300] ( ) [ ]

[1]

7 Oliver says, 'If I divide 85 apples between 5 people they will get 18 each.'

Write a **multiplication** statement to show that Oliver is not correct.

.... [1]
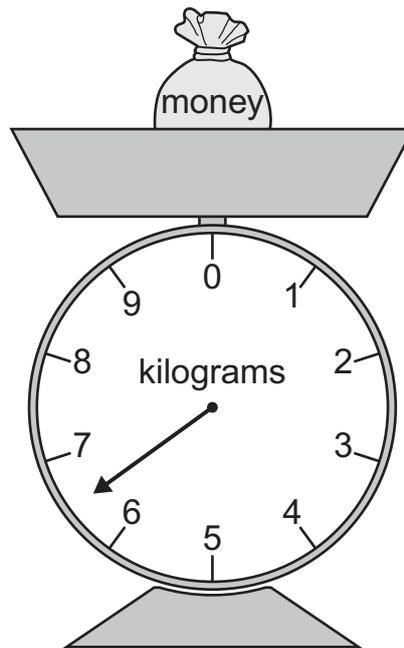
8 Here are two rectangles drawn on a centimetre squared grid.
The two rectangles have the same perimeter.

Draw a **different** rectangle on the grid that has the same perimeter.

[1]

9 A bag of money is placed on the scales.
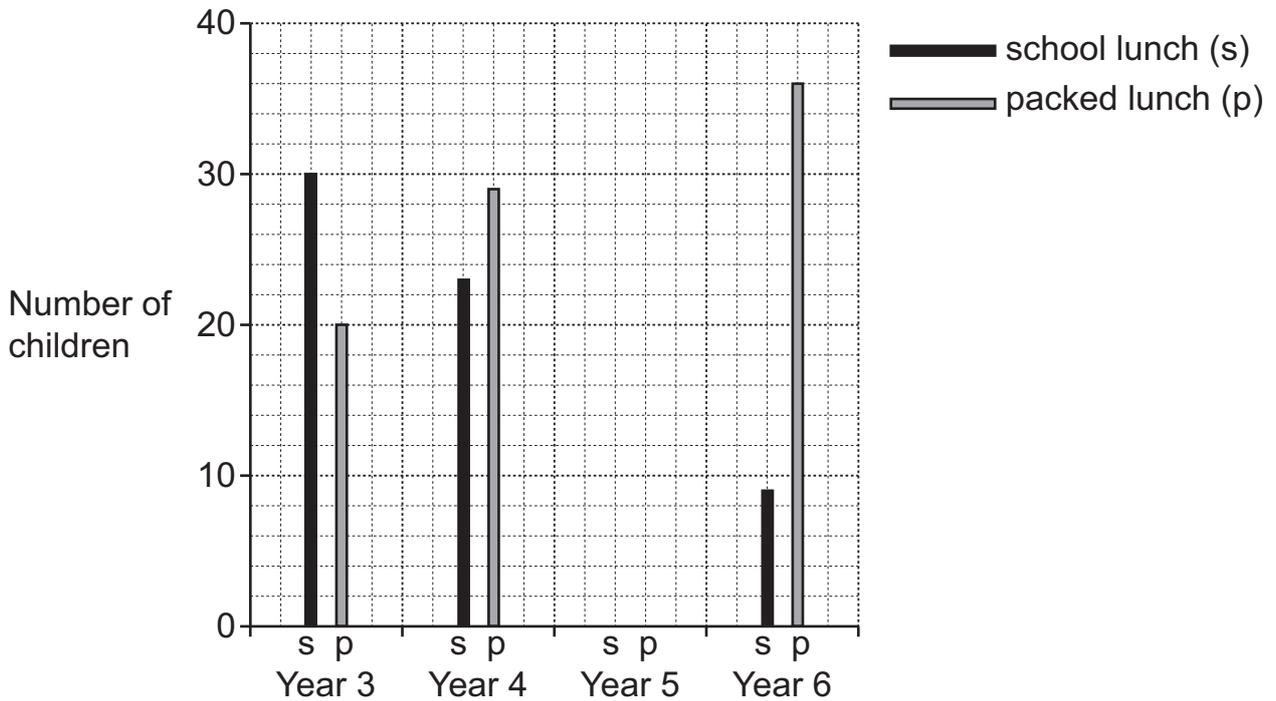

Estimate the mass of the bag of money.

.... kg   [1]

10 Calculate

$$9.5 \times (3 + 4) =$$ ....

$$9.5 \times 3 + 4 =$$ ....

[1]

11 All children in a school either have a school lunch or a packed lunch.
This bar line chart shows the number of children who have school or packed lunches in each year group.

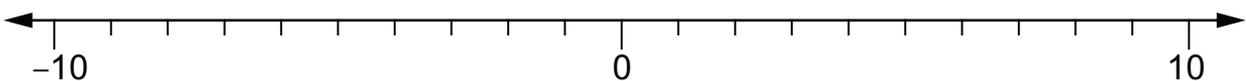(a) 20 children have school lunch and 32 children have packed lunch in year 5

Complete the bar line chart.

[1]

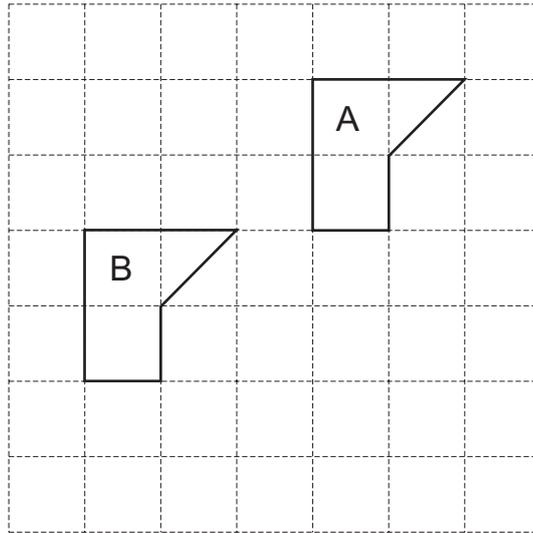(b) Write how many more children are in Year 4 than in Year 3

.... children [1]

12 Draw an arrow (↓) to show −6 on the number line.

[1]

13 Chen draws shape A on a grid of squares.
He translates the shape to position B.

Write instructions to describe the translation.

.... [1]

14 Here are six digit cards.

| 2 | 3 | 4 | 5 | 6 | 8 |

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

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

$$\frac{\square}{4} = \frac{6}{\square}$$

$$\frac{3}{\square} = \frac{\square}{10}$$

[2]

15 The symbols ○, □ and △ each represent a different single-digit number.

$$\bigcirc \times \triangle = 36$$

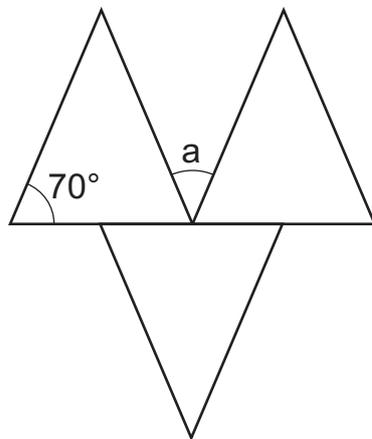$$\frac{\square}{2} = \bigcirc$$

Write the value of each symbol.

○ = ...

□ = ...

△ = ...

[1]

16 Three identical isosceles triangles are arranged to make a new shape.

70° a
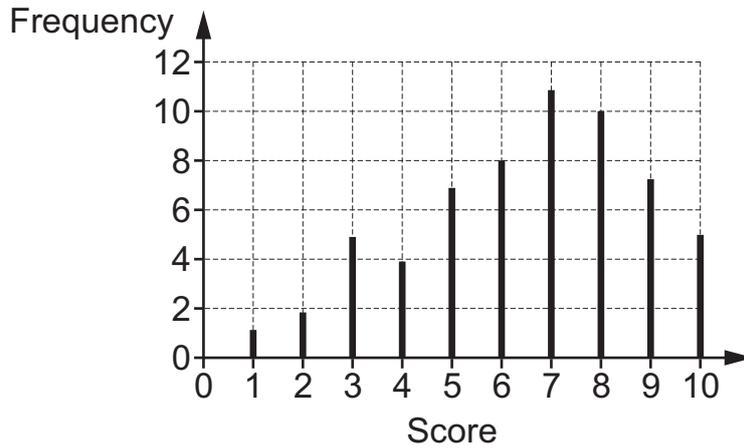
Not drawn to scale

Calculate the size of angle a.

....° [1]

17 Complete the diagram to show fractions equivalent to $\frac{3}{5}$

$$\frac{6}{\boxed{}}$$

$$\frac{\boxed{}}{20} \qquad \frac{3}{5} \qquad \frac{\boxed{}}{15}$$

$$\frac{\boxed{}}{100} \qquad \frac{27}{\boxed{}}$$
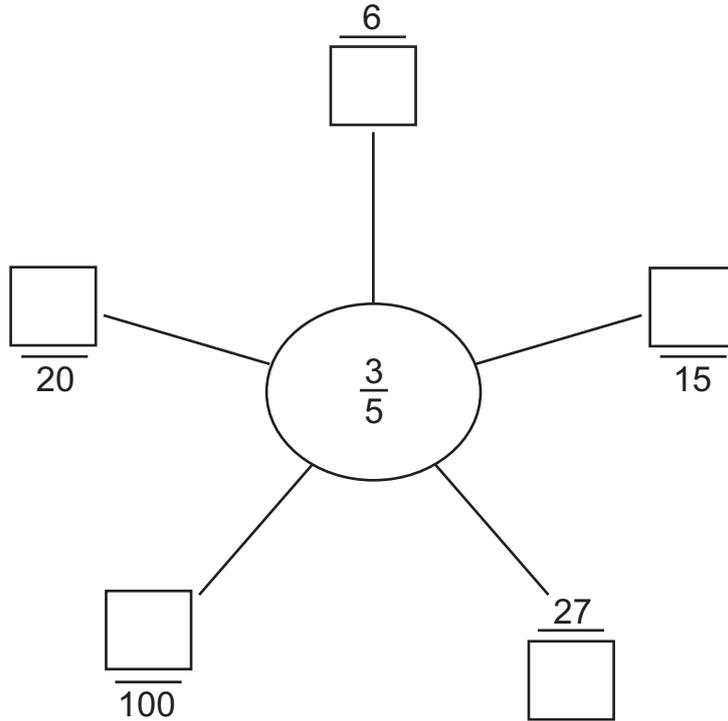
[2]

18 Here is a bar line chart.
It shows the scores of some students in a maths test.

Write the modal score. ....

Write the range of scores for this test. ....
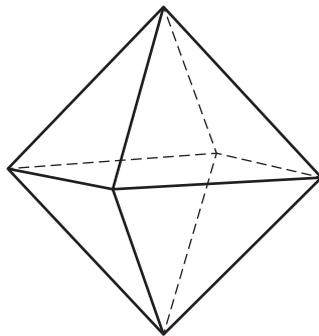
[2]

19 Match each fraction to an equivalent decimal.
The first one has been done for you.

$\frac{1}{2}$ 0.75

                           0.25

$\frac{3}{5}$

                           0.5

$\frac{3}{4}$

                           0.6

$\frac{30}{100}$

                           0.3

$\frac{3}{10}$ 0.03

[2]

20 Two identical square-based pyramids are joined to make a new shape.

Complete the table for the new shape.

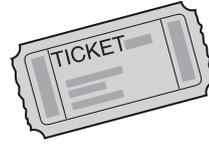|	
Number of faces	
Number of edges	
Number of vertices	

[2]

21 Rajiv has $25
He buys a magazine for $6.99
He also buys two cinema tickets costing $8.50 each.

Magazine
$6.99

Cinema ticket
$8.50 each

How much more money does he need to buy an ice-cream costing $2.99?

You must show your working.

$ .... [2]

22 Here is a grid of numbers.

Draw a ring around the **two** prime numbers.

21	22	23	24	25	26	27	28	29	30

[1]

23 Here is part of a sequence.
It continues in the same way.

........................, 170, 200, 230, ...

(a) Write the first number in the sequence that is greater than 1000

.... [1]

(b) Write the negative number in the sequence that is closest to zero.

.... [1]

24 Here are six measurements written on cards.

A	B	C	D	E	F
3.481 km	348.1 mm	34.81 m	3481 m	34.81 cm	3481 cm

Write the letters A, B, C, D, E and F to make pairs of equivalent measurements.

.... = ...

.... = ...

.... = ...

[1]

25 Here is a thermometer.
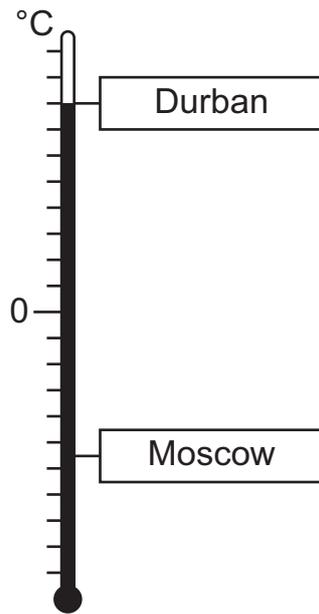
The difference in temperature between Moscow and Durban is 27°C.
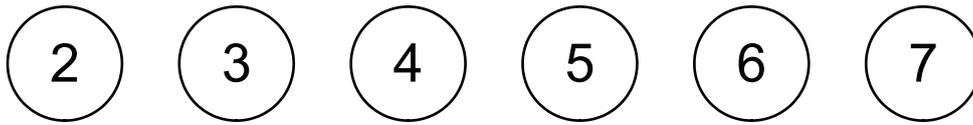
Write the temperature in Moscow.

.... °C   [1]

26 Calculate the area of this classroom.

Not drawn
to scale

1.8 m

4.5 m

3.3 m

6.5 m
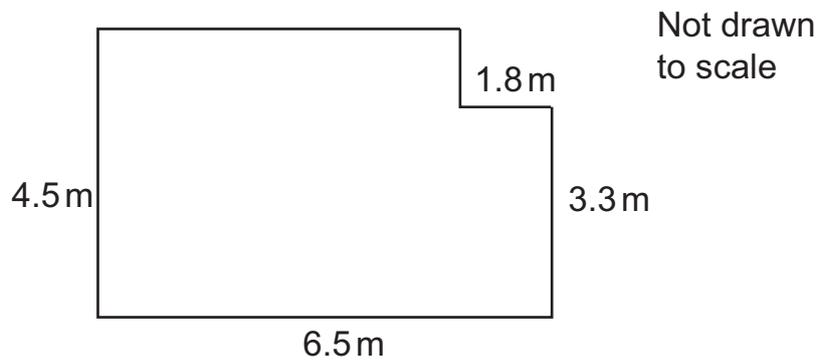
Show your working.

.... m^2 [2]

27 Yuri has some digit cards from 2 to 7

$$\boxed{2} \quad \boxed{3} \quad \boxed{4} \quad \boxed{5} \quad \boxed{6} \quad \boxed{7}$$

He puts them in a number triangle.
Each side of the triangle is a three-digit number.

Complete Yuri's triangle.

A three-digit number that is a multiple of 25

A three-digit number that is a multiple of 4 greater than 500

A three-digit number that is a multiple of 5 between 200 and 300
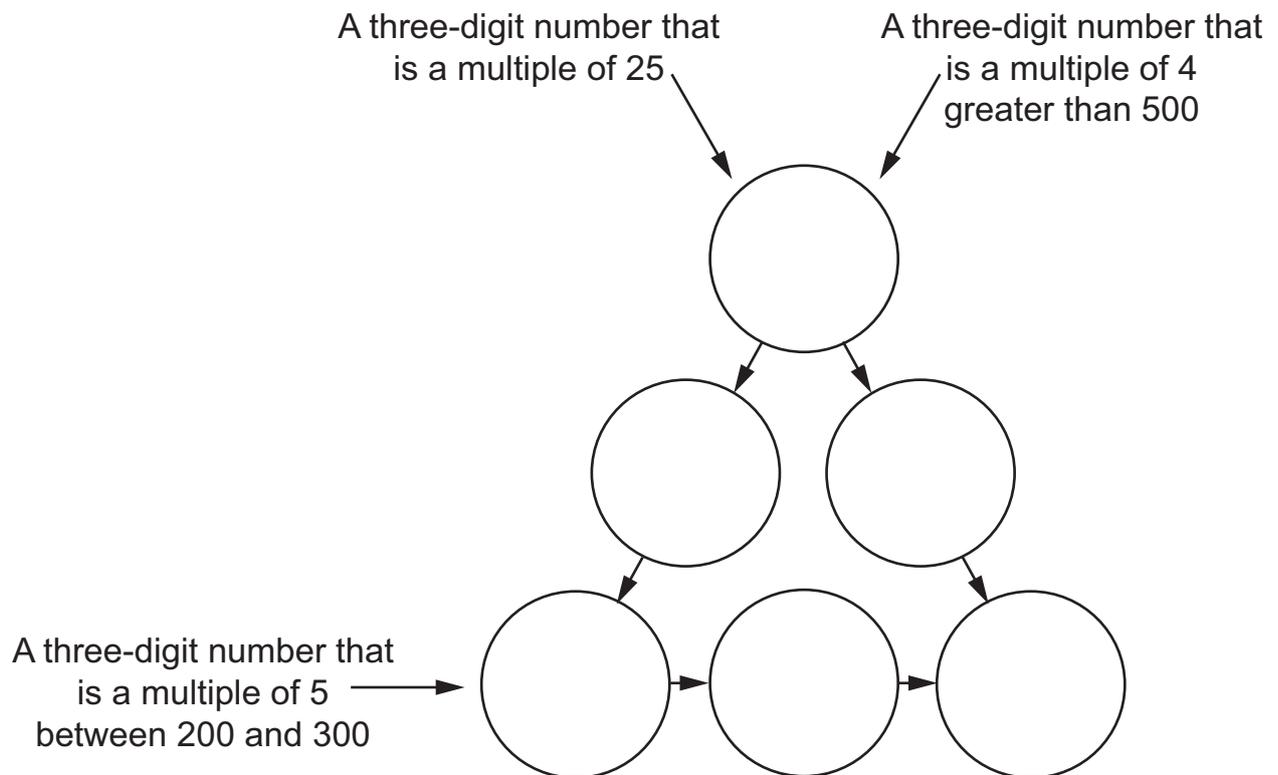
[2]

28 Here is a spinner with six equal sections.
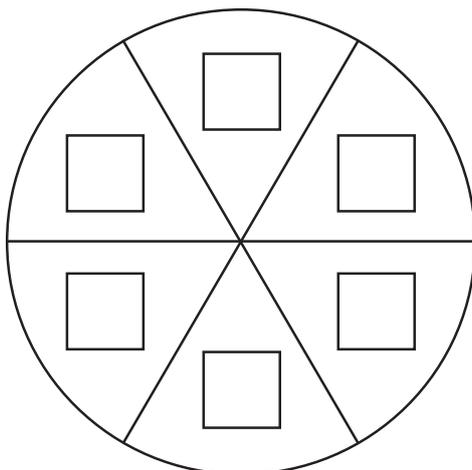
The likelihood of spinning a 1 is even.
The likelihood of spinning a 2 is impossible.
The likelihood of spinning a 3 is unlikely.
The likelihood of spinning a 4 is unlikely.

Complete the spinner so that each section is numbered 1 or 2 or 3 or 4

Anastasia is asked to make a different spinner so that spinning a 9 is certain.

Complete Anastasia's spinner.

[2]