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0862/01

May 2026

1 hour

You must answer on the question paper.

You will need: Geometrical instruments
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. Do **not** use correction fluid or tape.
- Do **not** write on any bar codes.
- You should show all your working in the booklet.
- You are **not** allowed to use a calculator.

INFORMATION

- The total mark for this paper is 50.
- The number of marks for each question or part question is shown in brackets [].

This document has **16** pages.

- 1 Complete the sentence using a word from the box.

nanometre	kilometre	millimetre	micrometre
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The most suitable unit for measuring the length of a river

is the

[1]

- 2 Work out the value of $\frac{n^4}{2}$ when $n = 2$

..... [1]

- 3 A circle has a radius of 5 cm.

Use a value of 3 for π to calculate the approximate area of the circle.

..... cm^2 [1]

- 4 Make h the subject of the formula.

$$h^2 = w$$

$h =$ [1]

5 Calculate.

$$\left(1 - \frac{5}{9}\right) \times \left(1 - \frac{5}{8}\right)$$

Give your answer as a fraction in its simplest form.

..... [2]

6 Here are two combinations of transformations.

a translation followed by a reflection

a rotation followed by a reflection

Draw a ring around how many of the two combinations of transformations result in a final shape that is congruent to the original shape.

none

only one

both

not possible to say

[1]

7 Draw a ring around the conversion that is correct.

$$\frac{1}{3} = 0.3$$

$$\frac{2}{3} = 0.\dot{2}$$

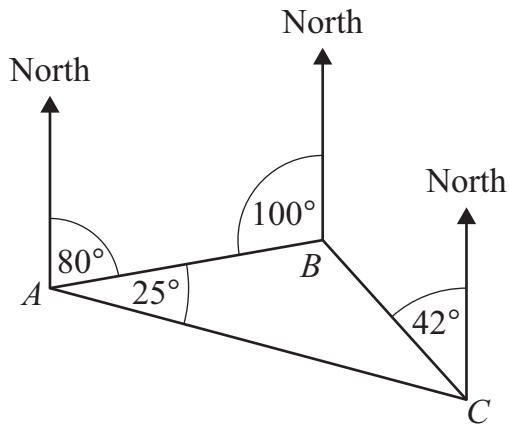
$$\frac{4}{9} = 4.9$$

$$\frac{5}{9} = 0.\dot{5}$$

[1]

- 8 The scale drawing shows the positions of towns A , B and C .

scale: 1 cm represents 10 km



- (a) Rajiv says, ‘The bearing of B from C is 042° .’

Explain why Rajiv is **not** correct.

.....
 [1]

- (b) Complete these sentences with the correct values.

The bearing of town C from town A is $^\circ$.

In real life, the distance from town A to town C is km.

[2]

- 9 Draw a line to match each calculation to the closest estimate of the answer.

$\sqrt{24.89}$

12

$(-6.12)^2$

5

$\sqrt{144.2}$

36

[1]

10 Chen says,

‘I think of a number, n .

I add 5

Then I square.’

Write an expression for the number Chen finishes with.

..... [1]

11 The table shows the original cost of two coats.

coat A	\$60
coat B	\$70

The original cost of coat A increases by 10%.

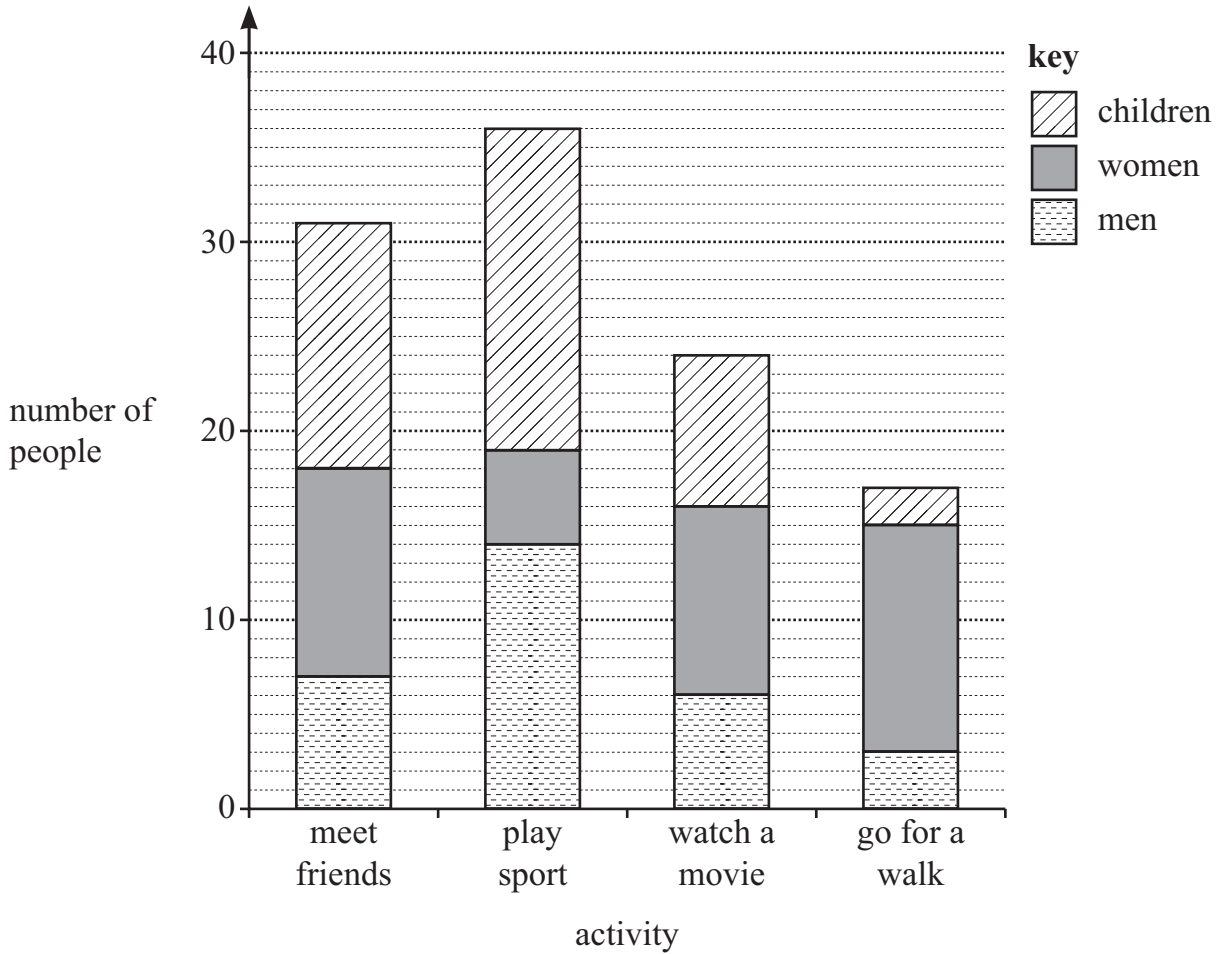
The original cost of coat B decreases by 5%.

Tick (✓) to show if each of these statements is correct or not correct.

	correct	not correct
The new cost of coat A is greater than \$70	☐	☐
The new cost of coat B is \$66.50	☐	☐

[1]

- 12** Mia collects data from a group of men, women and children. She asks each person if they like any of four activities. The compound bar chart shows the number who said they like each activity.



Mia writes some statements about her data.

Tick (✓) to show if each of Mia's statements is true or false.

statement	true	false
12 men said they like to play sport.		
A total of 17 people said they like to go for a walk.		
13 children said they like to meet friends.		
16 women said they like to watch a movie.		

[2]

- 13 Lily and Samira share the driving on a journey.

The ratio of the distance Lily drives to the distance Samira drives is $2 : 5$
 Samira drives 210 **more** kilometres than Lily.

Calculate the distance Lily drives.

..... km [2]

- 14 A rectangle has a perimeter of k cm.
 It is enlarged by a scale factor of 20
 The enlarged rectangle has a perimeter of 260 cm.

Find the value of k .

$k =$ [1]

- 15 Calculate.

$$\frac{-1.2 \times 5}{-0.4}$$

..... [2]

- 16 Oliver records the number of passengers on some buses.

This back-to-back stem-and-leaf diagram shows the number of passengers on each of the eight buses in the town centre.

countryside					town centre			
				2				
				3	8			
				4	0	3	7	9
				5	3	4	4	

key: 2|3|8 represents

..... passengers on a bus in the countryside and

..... passengers on a bus in the town centre

Here are the number of passengers on the eight buses in the countryside.

48 32 27 32 50 41 23 27

- (a) Complete the back-to-back stem-and-leaf diagram.

[3]

- (b) Complete the table.

	countryside	town centre
median	32	
range	27	

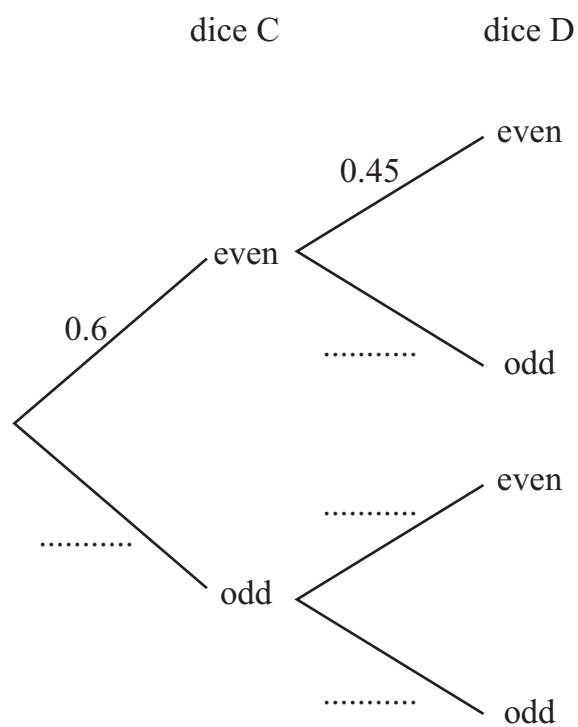
[2]

17 (a) Carlos has two biased dice.

The probability of rolling an even number on dice C is 0.6

The probability of rolling an even number on dice D is 0.45

Complete the tree diagram with the four missing probabilities.



[2]

- (b) Carlos also has two **fair** spinners.
 Spinner E has sides numbered 1 to 5
 Spinner F has sides numbered 1 to 9

Carlos draws this possibility diagram to represent the outcomes of spinning both spinners.

spinner E	5		x	x	x	x	x	x	x	x	x	x
	4		x	x	x	x	x	x	x	x	x	x
	3		x	x	x	x	x	x	x	x	x	x
	2		x	x	x	x	x	x	x	x	x	x
	1		x	x	x	x	x	x	x	x	x	x
			1	2	3	4	5	6	7	8	9	
			spinner F									

Carlos says,

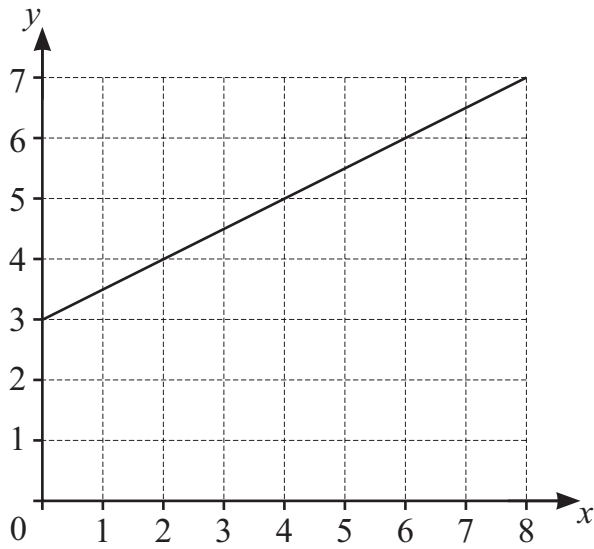
‘There are 14 numbers in total on both spinners and 6 of them are even.
 So the probability of spinning an even number on both spinners is $\frac{6}{14}$ ’

Carlos is **not** correct.

Find the correct probability of spinning an even number on both spinners.

..... [2]

- 18 The diagram shows the graph of a straight line.



Find the equation of the line.

Give your answer in the form $y = mx + c$

$y =$ [2]

- 19 The interior angle of a regular polygon is 150° .

Find the number of sides of the polygon.

..... [2]

20 Work out.

$$12.3 \times 10^{-4}$$

..... [1]

21 Narrow ribbon costs 25 cents per metre.
Wide ribbon costs 40 cents per metre.

Eva sells n metres of narrow ribbon and w metres of wide ribbon.
The total cost of the ribbon she sells is \$7.75

Tick (✓) to show each of the functions that correctly represent this information.

$$775 = 25n + 40w$$

☐

$$7.75 = 25n + 40w$$

☐

$$7.75 = 0.25n + 0.40w$$

☐

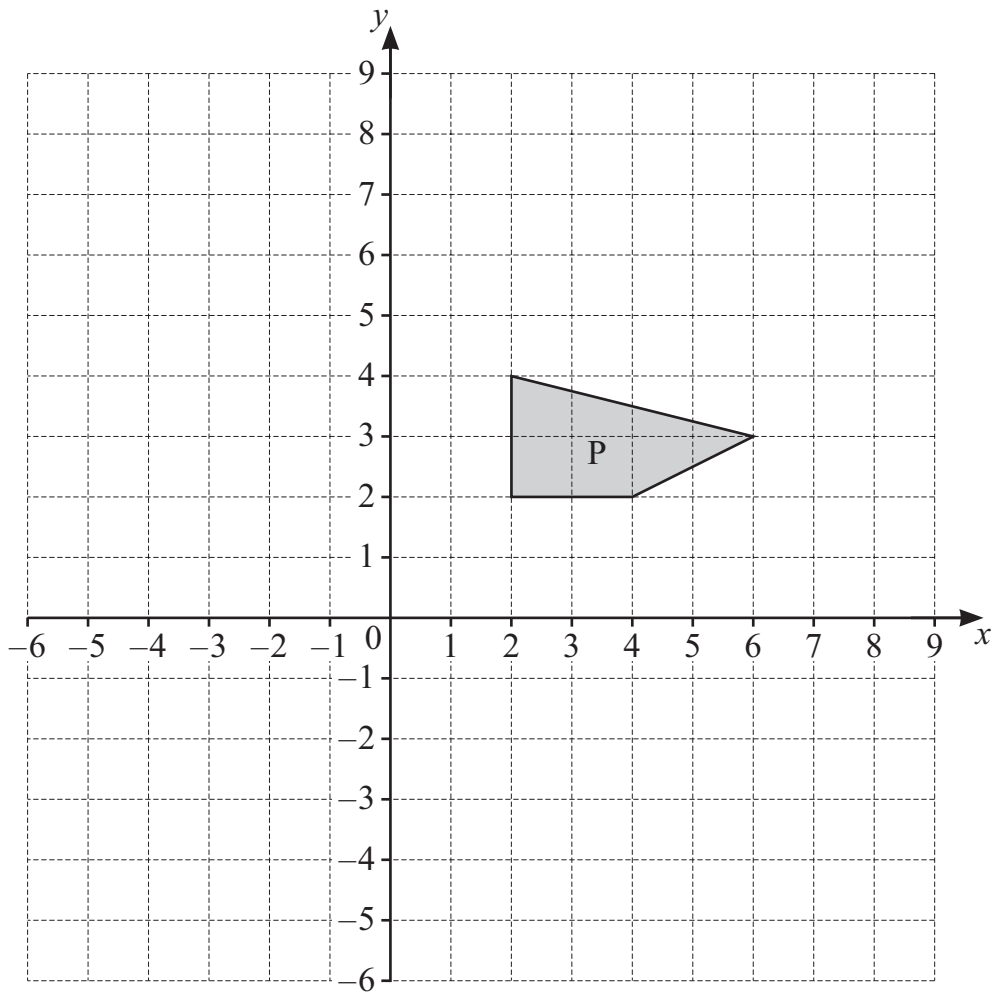
[1]

22 Write a **whole number** in the box to make this statement true.

$$3 < \sqrt{\boxed{}} < 4$$

[1]

23 The diagram shows shape P drawn on a grid.



Shape P is reflected in the line $y = 1$ to make shape Q.

Shape Q is then translated by $\begin{pmatrix} 1 \\ -3 \end{pmatrix}$ to make shape R.

Draw shape R on the grid.

You do **not** need to rub out your shape Q.

[2]

24 Tick (✓) to show if each of these facts about the line $y = 1 - 5x$ is true or false.

	true	false
The line passes through the point $(-2, 11)$.	☐	☐
The line is parallel to $y = 5x - 1$	☐	☐
The line intersects the x -axis at the point $(-5, 0)$.	☐	☐
When x increases by 1, y decreases by 5	☐	☐

[2]

25 The mass of a suitcase is 11.30 kg correct to 2 decimal places.

Find the lower bound and the upper bound of the mass of the suitcase.

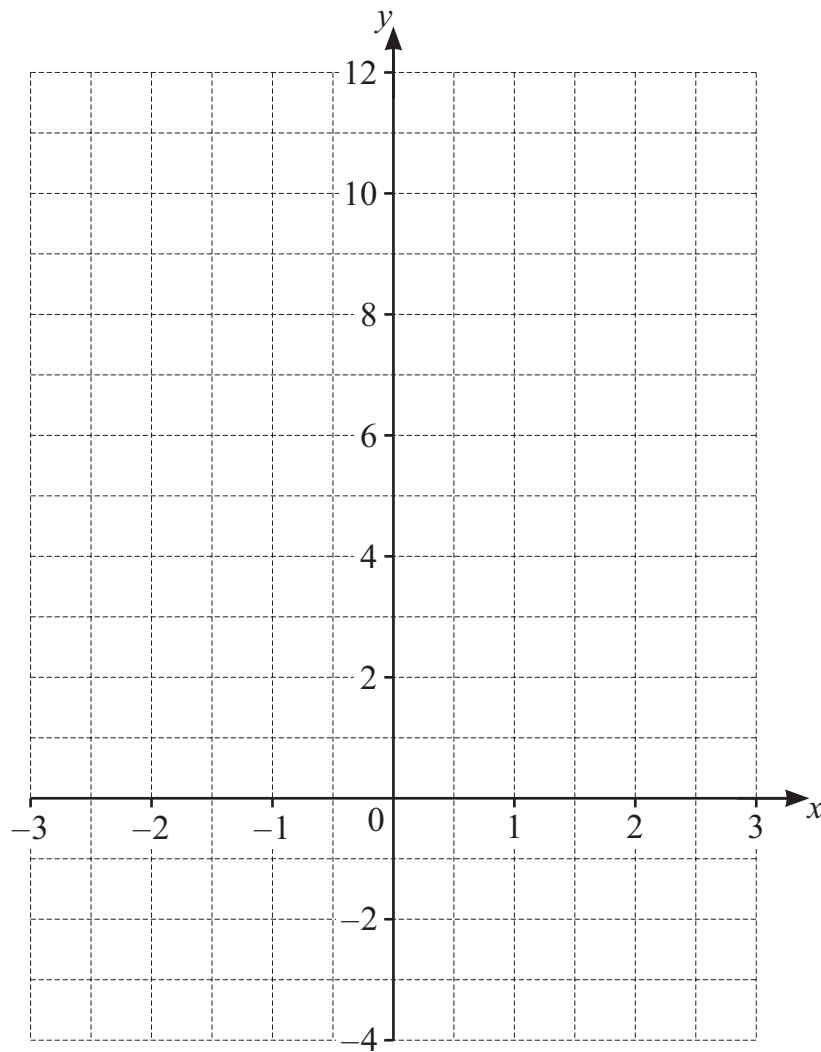
lower bound = kg

upper bound = kg

[2]

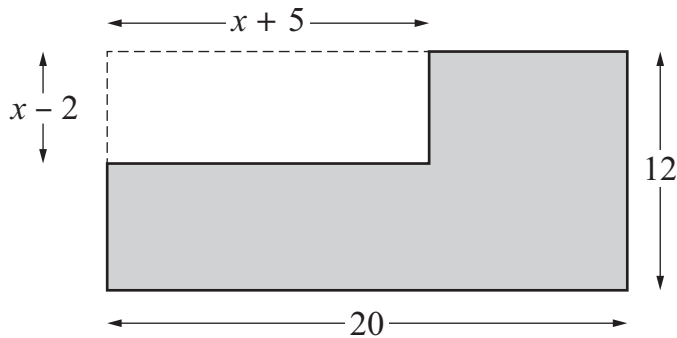
- 26** Draw the graph of $y = x^2 + 1$ for values of x between -3 and 3
You may use the table to help you.

x	-3	-2	-1	0	1	2	3
y	10					5	



[4]

- 27 The diagram shows a rectangle with a smaller rectangle cut out of it.
All measurements are in centimetres.



not to scale

Write an expression for the **shaded** area.
Give your answer in its simplest form.

..... cm^2 [3]

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