

Write your name here	
Surname	Other names
Centre Number	Candidate Number
Pearson Edexcel Level 1/Level 2 GCSE (9–1)	
Mathematics Paper 2 (Calculator)	
Aiming for Grade 5	Foundation Tier
Spring 2024 Practice Paper 44 marks 45 minutes	Paper Reference 1MA1/2F
You must have: Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB pencil, eraser, calculator. Tracing paper may be used.	Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided
– *there may be more space than you need.*
- You must **show all your working**.
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- **Calculators may be used.**
- If your calculator does not have a π button, take the value of π to be 3.142 unless the question instructs otherwise.



Information

- The total mark for this paper is 44. There are 16 questions.
- Questions have been broadly arranged in an ascending order of mean difficulty, as found by students achieving Grade 5 in the Summer and November 2023 examinations.
- Questions marked with an asterisk (*) also appear on the Higher Tier paper.
- The marks for **each** question are shown in brackets
– *use this as a guide as to how much time to spend on each question.*

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

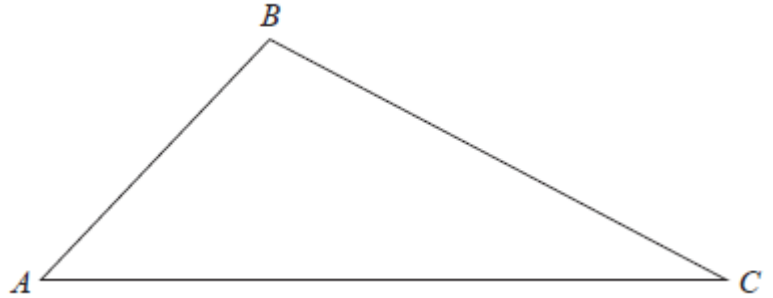
Answer all questions.

Write your answers in the spaces provided.

You must write down all the stages in your working.

1 Here is a triangle.

(a) Measure the length of AC .

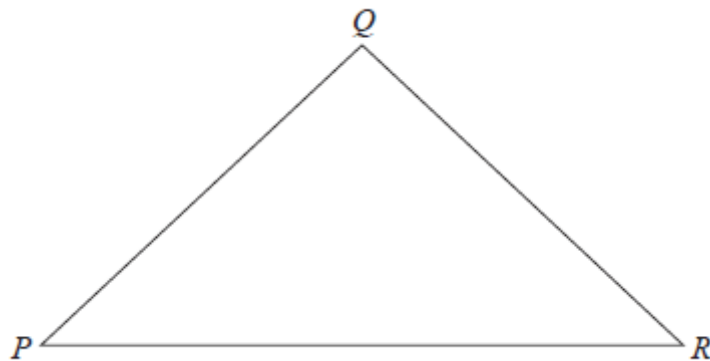


..... cm
(1)

(b) Measure the size of angle B .

.....^o
(1)

Here is a different triangle.



$$QP = QR$$

(c) Write down the mathematical name of this triangle.

.....
(1)

(Total for Question 1 is 3 marks)

2 Here is a 3-D shape.

(a) Write down the name of this 3-D shape.



.....
(1)

(b) In the space below, draw a sketch of a triangular prism.

(1)

(Total for Question 2 is 2 marks)

*3 Make g the subject of the formula $f = 3g + 11$

.....
(Total for Question 3 is 2 marks)

***4** A number, d , is rounded to 1 decimal place.

The result is 12.7

Complete the error interval for d .

..... $\leq d <$

(Total for Question 4 is 2 marks)

5 Solve the simultaneous equations

$$3x + y = -4.5$$

$$4x + 3y = -3.5$$

$x =$

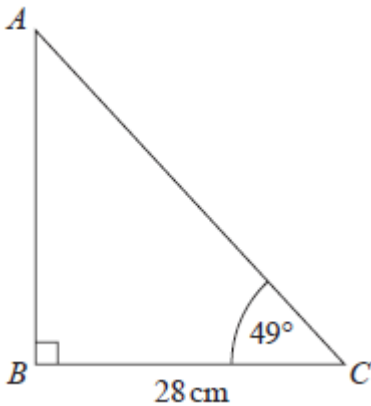
$y =$

(Total for Question 5 is 3 marks)

- 6 Ethan buys a box of 24 cans of lemonade for £7
There are 330 ml of lemonade in each can.
Work out the cost of 100 ml of lemonade.
Give your answer correct to the nearest penny.

.....p
(Total for Question 6 is 3 marks)

- 7 ABC is a right-angled triangle.
Calculate the length of AB .
Give your answer correct to 3 significant figures.



..... cm
(Total for Question 7 is 2 marks)

***8** Chris, Debbie and Errol share some money in the ratio 3 : 4 : 2
Debbie gets £120
Chris then gives some of his share to Debbie and some of his share to Errol.
The money that Chris, Debbie and Errol each have is now in the ratio 2 : 5 : 3
How much money did Chris give to Errol?

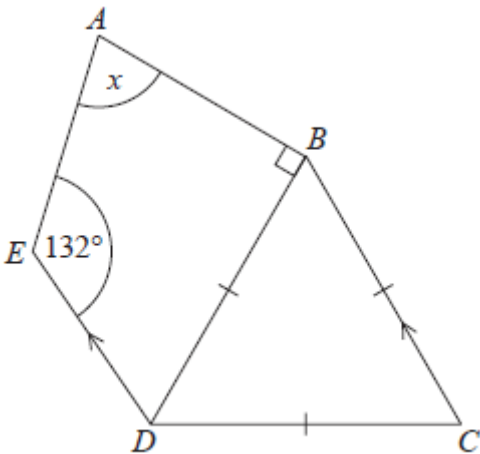
£.....
(Total for Question 8 is 4 marks)

9 The diagram shows a quadrilateral $ABDE$ and an equilateral triangle BCD .

CB is parallel to DE .

Angle $AED = 132^\circ$

Work out the size of the angle marked x .
 You must give a reason for each stage of your working.

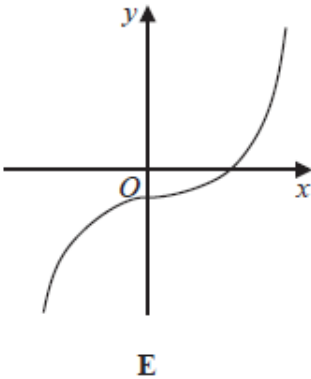
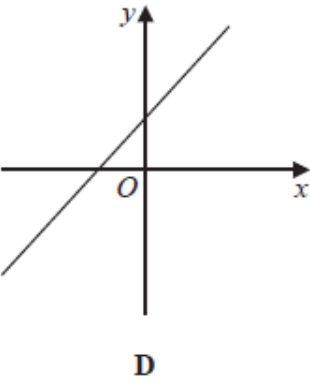
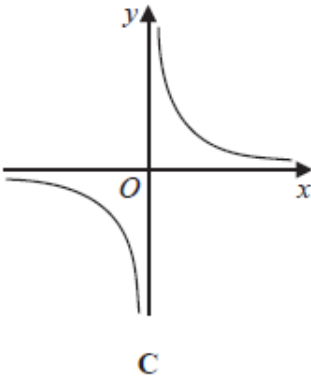
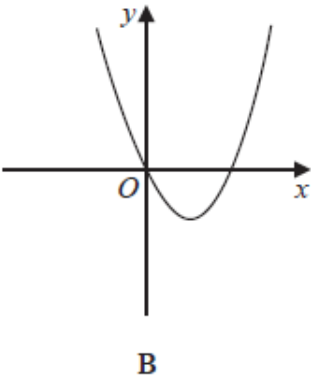
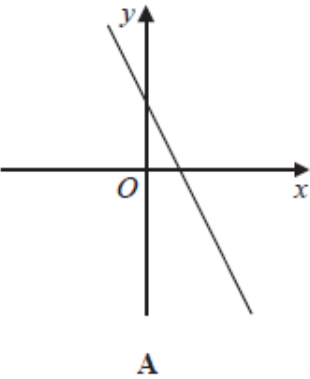


.....°
 (Total for Question 9 is 4 marks)

*10 Solve $\frac{2}{5}g - 4 < 6$

.....
 (Total for Question 10 is 3 marks)

11 Here are five graphs.

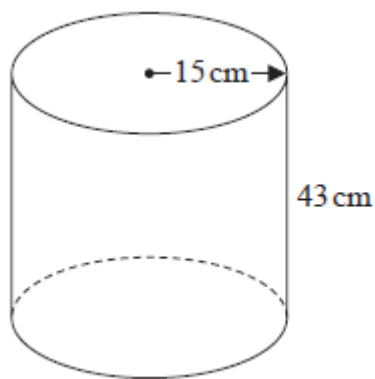


Equation	Graph
$y = x^2 - 4x$	
$y = x + 3$	
$y = x^3 - 2$	
$y = \frac{1}{x}$	
$y = 5 - 2x$	

Match the letter of each graph with its equation.

(Total for Question 11 is 3 marks)

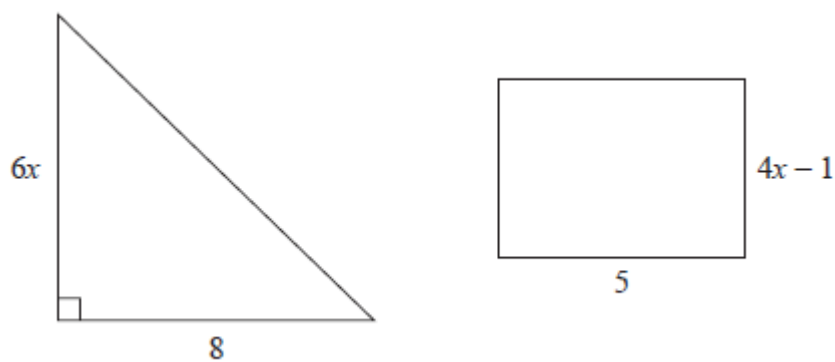
***12** The diagram shows an empty tank in the shape of a cylinder.



The cylinder has radius 15 cm and height 43 cm.
Water flows into the tank at a rate of 0.47 litres per minute.
Calculate the number of minutes it will take to completely fill the tank.
Give your answer correct to the nearest minute.

..... minutes
(Total for Question 12 is 4 marks)

***13** Here is a triangle and a rectangle.



All measurements are in centimetres.
The area of the triangle is 10 cm^2 greater than the area of the rectangle.
Work out the value of x .

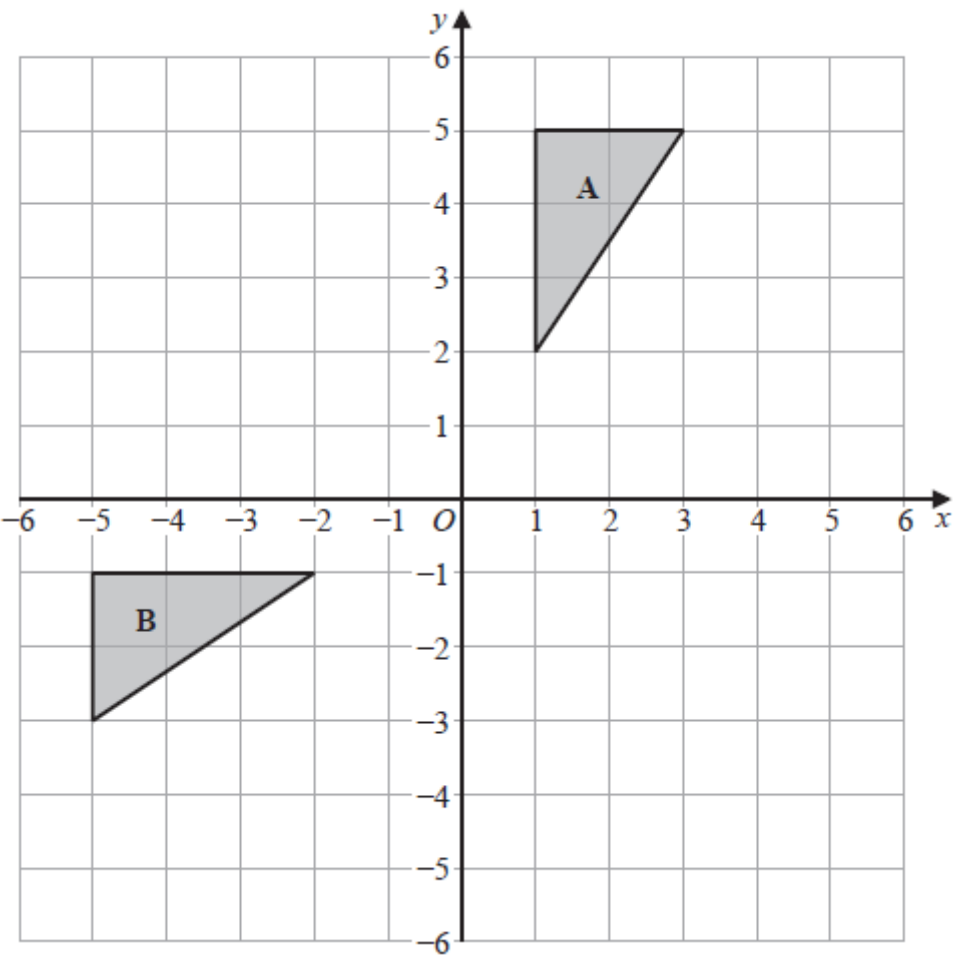
$x = \dots\dots\dots$

(Total for Question 13 is 4 marks)

***14** Work out the value of the reciprocal of 0.625

$\dots\dots\dots$

(Total for Question 14 is 1 mark)



Describe fully the single transformation that maps triangle **A** onto triangle **B**.

.....

.....

(Total for Question 15 is 2 marks)

***16** The bearing of port *B* from port *A* is 147°
 Work out the bearing of port *A* from port *B*.

.....^o

(Total for Question 16 is 2 marks)

TOTAL FOR PAPER IS 44 MARKS