Write your name here

Surname		Other names

Pearson Edexcel International GCSE

Centre Number

Candidate Number

Mathematics A
Practice paper 6F

Foundation Tier

Time: 2 hours

Paper Reference

4MA1/PP6F

You must have:
Ruler graduated in centimetres and millimetres, protractor, 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.
- Without sufficient working, correct answers may be awarded no marks.
- Answer the questions in the spaces provided
  – *there may be more space than you need.*
- **Calculators may be used.**
- You must **NOT** write anything on the formulae page.
  Anything you write on the formulae page will gain NO credit.

Information

- The total mark for this paper is 100.
- 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
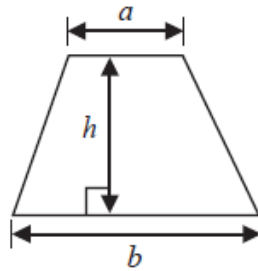
- Read each question carefully before you start to answer it.
- Check your answers if you have time at the end.

International GCSE Mathematics
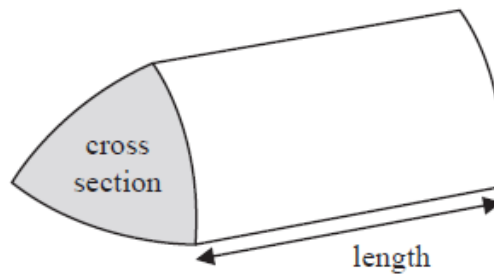
Formulae sheet – Foundation Tier

Area of trapezium $= \frac{1}{2}(a + b)h$

Volume of prism = area of cross section × length

Volume of cylinder $= \pi r^2 h$

Curved surface area of cylinder $= 2\pi rh$
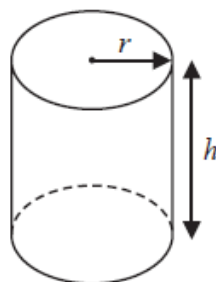
Answer ALL TWENTY FIVE questions.

Write your answers in the spaces provided.

You must write down all the stages in your working.

1 The diagram shows a shape drawn on a centimetre grid.
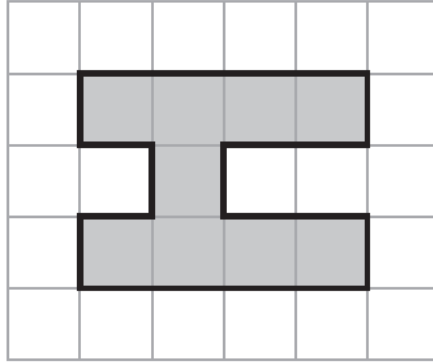
(*a*) (i) Find the area of the shape.

.... cm^2

(ii) Find the perimeter of the shape.

.... cm

(iii) On the grid, draw the line of symmetry of the shape.

(3)

Here is a different shape.
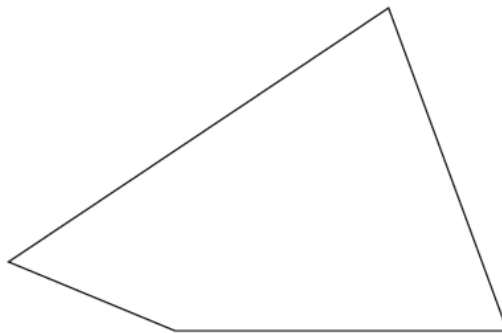
(*b*) On this shape, mark an obtuse angle.
Label your angle *O*

(1)

(Total for Question 1 is 4 marks)

2   (*a*) Write down the number that is exactly halfway between 8.6 and 8.7.

....

(1)

7.2   7.3
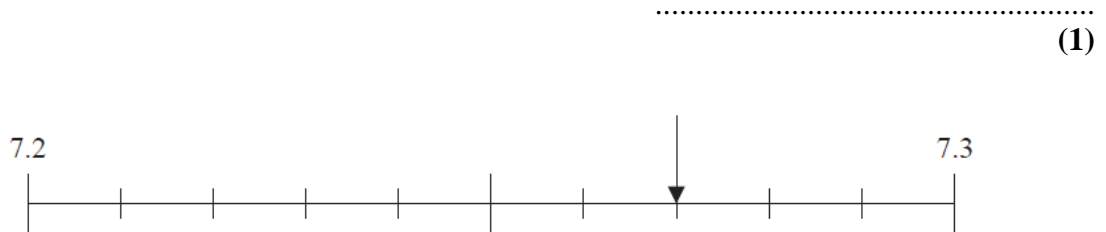
(*b*) Write down the number on the scale marked with an arrow.

....

(1)

7.2   7.3

(*c*) (i)   On this scale, mark with an arrow (↓) the number 7.235.

    (ii) Write 7.235 to the nearest whole number.

....

(2)

(Total for Question 2 is 4 marks)

3   The diagram shows a 5-sided polygon *ABCDE* drawn on a centimetre grid.
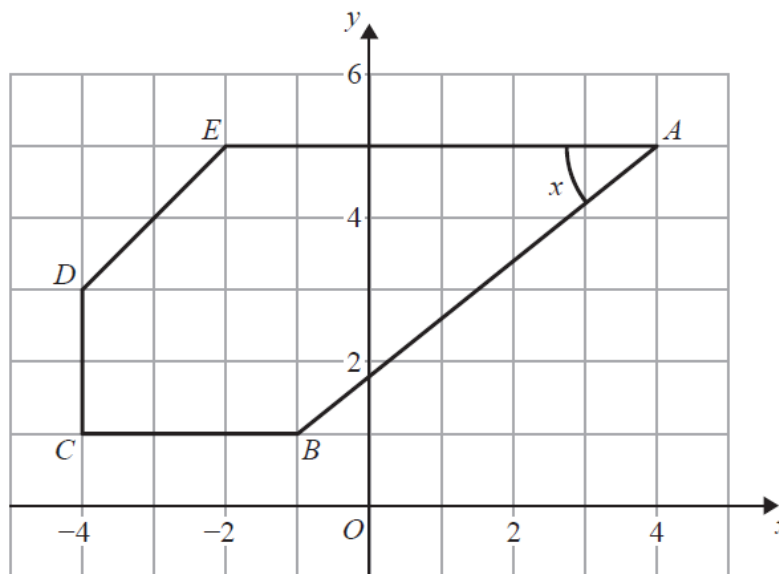
(*a*) Write down the coordinates of the point *A*.

(............................ , ...)
(1)

(*b*) Write down the coordinates of the point *C*.

(............................ , ...)
(1)

(*c*) Write down the mathematical name for a 5-sided polygon.

....
(1)

(*d*) Measure the length of the line *AB*.
Give your answer in centimetres to 1 decimal place.

.... cm
(1)

(*e*) Measure the size of the angle marked *x*.

....°
(1)

(Total for Question 3 is 5 marks)

4 Here is a sequence of patterns made from sticks.

Pattern number 1   Pattern number 2   Pattern number 3

(*a*) Complete the table.

Pattern number	1	2	3	4
Number of sticks	4	7	10	

(1)

(*b*) Explain how you worked out your answer.

....

(1)

(*c*) How many sticks are needed to make Pattern number 12?

....

(2)

(*d*) Work out the Pattern number of the pattern made from exactly 67 sticks.

....

(2)

(Total for Question 4 is 6 marks)

5 (*a*) Complete the following sentences by writing a sensible metric unit on each of the dotted lines.

(i) The length of a pen is 14 ....

(ii)The weight of a television set is 16 ....

(iii) The area of a classroom floor is 60 ....

(3)

Roberta has a jug containing 2 litres of juice.
She pours 150 millilitres of juice from the jug into each of 3 glasses.

(*b*) Work out the amount of juice still in the jug.
You must give the units of your answer.

....

(3)

(Total for Question 5 is 6 marks)

6   (*a*) Write down a prime number between 20 and 40.

....
(1)

(*b*) Work out the cube of 7.

....
(1)

(Total for Question 6 is 2 marks)
_____

7 Here are the distances cycled, in km, on the first 6 days of the 2015 Tour de France cycle race.

Day	1	2	3	4	5	6
Distance (km)	14	166	160	224	190	192

(*a*) Work out the range of these distances.

.... km
(1)

(*b*) Work out the median distance.

.... km
(2)

Michel says,

"The median is a better average to use for these 6 distances than the mean."

(*c*) Explain why Michel is right.

....

....
(1)

(Total for Question 7 is 4 marks)

8 You can use this graph to change between pounds (£) and Hong Kong dollars (HKD).
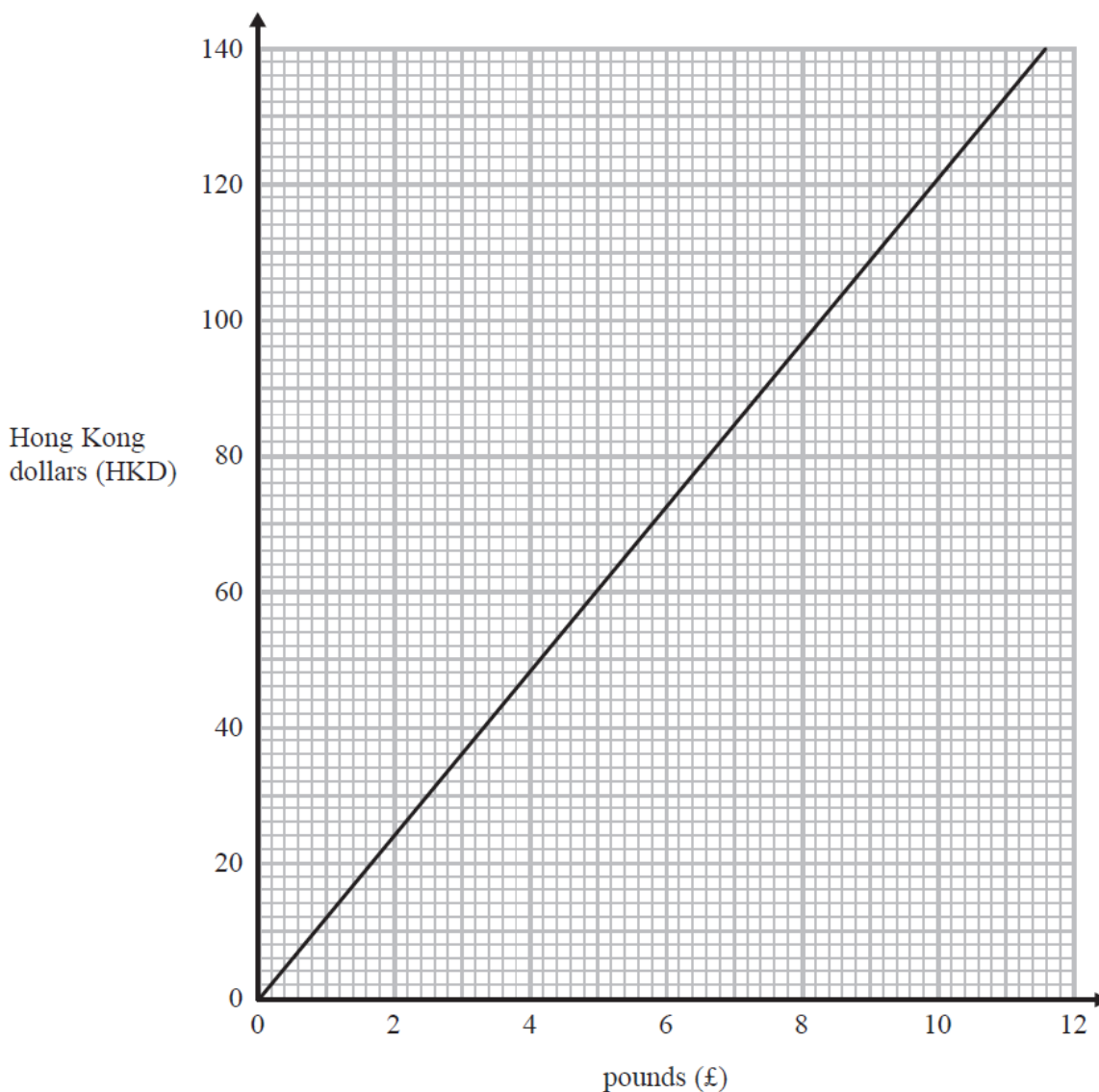
(a) Change 120 Hong Kong dollars into pounds.

£..

(1)

(b) Change £6 into Hong Kong dollars.

.... HKD

(1)

(c) Change 1000 Hong Kong dollars into pounds.

£..

(2)

(Total for Question 8 is 4 marks)

9 Alison buys 6 plants.
The plants cost £2.96 each.
She pays with a £20 note.

Work out how much change Alison should get.

£..

(Total for Question 9 is 3 marks)

---

10 (*a*) Write 23% as a fraction.

....
(1)

Here are 5 numbers.

$$\frac{5}{9} \qquad 0.59 \qquad \frac{8}{15} \qquad 61\% \qquad \frac{3}{5}$$

(*b*) Write these numbers in order of size.
Start with the smallest number.

....
(3)

(Total for Question 10 is 4 marks)

---

11 240 people were asked why they had come to Dubai.
The pie chart gives information about their answers.
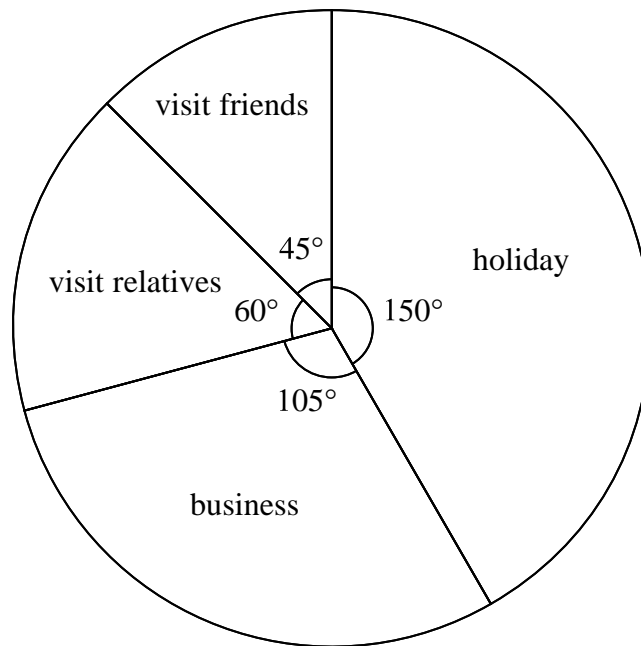
(*a*) How many of these people had come to Dubai on business?

....

(2)

Tavish asked 300 people at an airport in Sri Lanka why they had come to Sri Lanka.
He is going to draw a pie chart for his results.

120 of the 300 people said that they had come to Sri Lanka for a holiday.
Tavish draws a sector on his pie chart for this information.

(*b*) Work out the size of the angle of this sector.

.... °

(2)

(Total for Question 11 is 4 marks)

12 *A* is the point with coordinates (4, 11)
   B is the point with coordinates (8, 3)

Work out the coordinates of the midpoint of *AB*.

(........................... , ...)
(Total for Question 12 is 2 marks)

_____

13 A plane flew 8740 km from Nairobi to Hong Kong.
   The flight time was 13 hours 15 minutes.

Work out the average speed of the plane.
Give your answer, in kilometres per hour, correct to the nearest whole number.

.... kilometres per hour
(Total for Question 13 is 3 marks)

_____

14 There are 80 counters in a bag.
The counters are either red or blue.

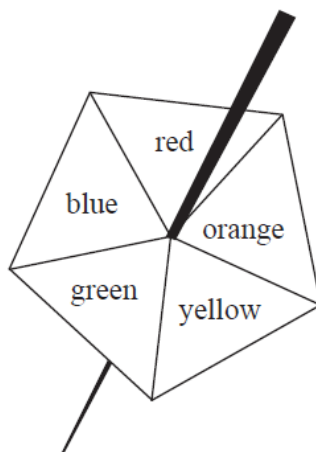The ratio of the number of red counters to the number of blue counters is 3 : 1

Michael takes 15% of the red counters out of the bag.

Alison takes $\frac{1}{5}$ of the blue counters out of the bag.

How many counters are now in the bag?

....

(Total for Question 14 is 5 marks)

15 Here is a biased five-sided spinner.

When the spinner is spun, it can land on red, orange, yellow, green or blue.
The probabilities that it lands on red, orange and yellow are given in the table.

Colour	red	orange	yellow	green	blue
Probability	0.4	0.2	0.1		

The probability that the spinner lands on green is the same as the probability that the spinner lands on blue.

Michael spins the spinner once.

Work out the probability that the spinner lands on green.

....

(Total for Question 15 is 3 marks)

_____

16　Work out the value of $\dfrac{17.7 \times 5.8}{\sqrt{3.4} + 5.3}$

Write down all the figures on your calculator display.

....

(Total for Question 16 is 2 marks)

17 A lion is 224 cm long.

Simon makes a scale model of the lion.
He uses a scale of 1 : 8

(*a*) Work out the length of the scale model.

.... cm

(2)

In 2010, there were 411 Asiatic lions in India.
In 2015, there were 523 Asiatic lions in India.

(*b*) Work out the percentage increase in the number of Asiatic lions in India from
2010 to 2015.
Give your answer correct to 1 decimal place.

....%

(3)

(Total for Question 17 is 5 marks)

18 Show that $5\dfrac{2}{3} - 3\dfrac{4}{5} = 1\dfrac{13}{15}$

(Total for Question 18 is 3 marks)
_____

**19** The frequency table shows information about the distances 60 office workers travel to work each day.

Distance travelled (d km)	Frequency
$0 < d \leqslant 10$	5
$10 < d \leqslant 20$	12
$20 < d \leqslant 30$	17
$30 < d \leqslant 40$	20
$40 < d \leqslant 50$	6

Work out an estimate for the mean distance travelled to work by these office workers.
Give your answer correct to 1 decimal place.

.... km

(Total for Question 19 is 4 marks)

20 (*a*)   On the grid, draw the graph of $y = -2x + 4$ for values of x from -1 to 5.
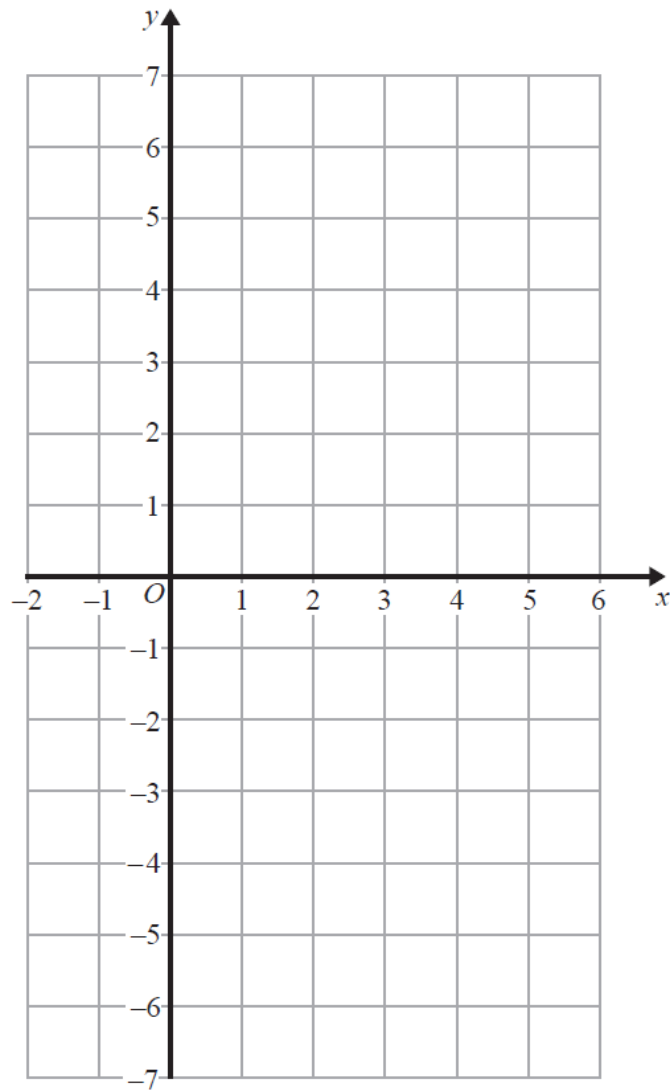
(4)

(*b*) Show by shading on the grid, the region defined by all three of the inequalities

$$y \leq -2x + 4$$

$$y \geq -4$$

$$x \geq 1$$

Label your region **R**.

(3)

(Total for Question 20 is 7 marks)

21 Solve $\dfrac{6x - 5}{2} = x + 1$

Show clear algebraic working.

$x =$ ....

(Total for Question 21 is 3 marks)

_____

22 The value of a boat depreciates by 16% each year.
At the end of 2012, the value of the boat is £65000.

Work out the value of the boat at the end of 2015.

£ ....

(Total for Question 22 is 3 marks)

_____

23 Lijuan's salary is 180 000 Hong Kong Dollars (HK$).
She gets a salary increase of 3%
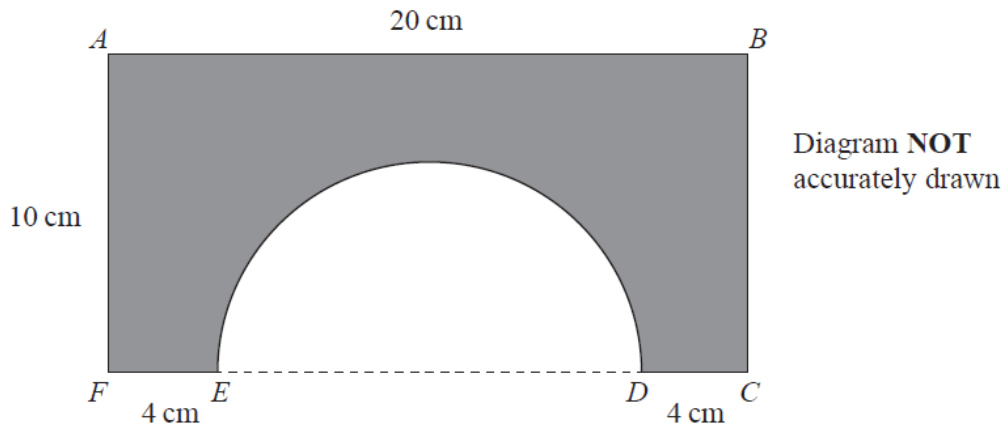
(*a*) Work out Lijuan's salary after this increase.

HK$..

(3)

In a sale, all normal prices are reduced by 15%
The sale price of a camera is HK$6630.

(*b*) Work out the normal price of the camera.

HK$..

(3)

(Total for Question 23 is 6 marks)

24

20 cm

A

B

Diagram **NOT**
accurately drawn

10 cm

F   *E*

4 cm

D   *C*

4 cm

The shaded shape is made by cutting a semicircle from a rectangular piece of card, *ABCF*, as shown in the diagram.

FEDC is a straight line.
The centre of the semicircle lies on *ED*.
AF = *BC* = 10 cm, *AB* = 20 cm, *FE* = *DC* = 4 cm.

Work out the perimeter of the shaded shape.
Give your answer correct to 3 significant figures.

.... cm

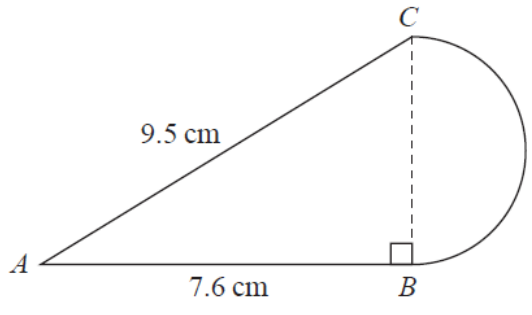**(Total for Question 24 is 3 marks)**

25

Diagram **NOT** accurately drawn

The diagram shows a shape made from triangle *ABC* and a semicircle with diameter *BC*.
Triangle *ABC* is right-angled at *B*.

AB = 7.6 cm and *AC* = 9.5 cm.

Calculate the area of the shape.
Give your answer correct to 3 significant figures.

....cm^2

(Total for Question 25 is 5 marks)

_____

TOTAL FOR PAPER: 100 MARKS