18 Use ruler and compasses only to construct the perpendicular bisector of line *AB*
You must show all your construction lines.

A

B
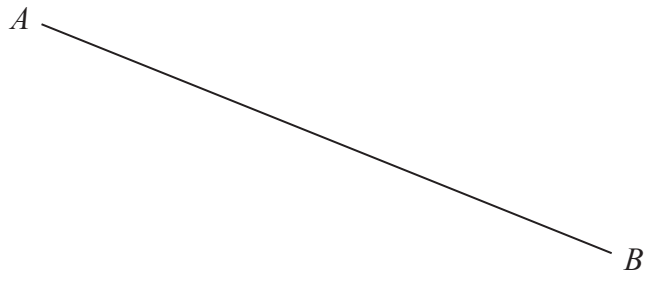
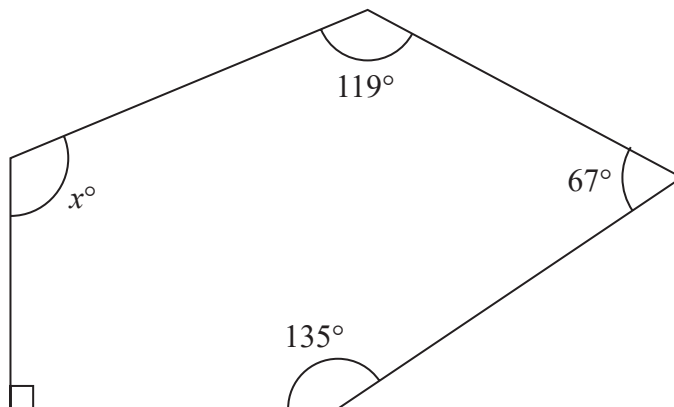**(Total for Question 18 is 2 marks)**

19 The diagram shows a pentagon.

119°

$x°$

135°

67°

Diagram **NOT** accurately drawn

Work out the value of x

$x =$ ....

(Total for Question 19 is 3 marks)

20 In a box, there are only green sweets, orange sweets and yellow sweets.

There are 280 sweets in the box so that

the number of green sweets : the number of orange sweets = 2 : 3

and

the number of orange sweets : the number of yellow sweets = 1 : 5

Work out how many green sweets there are in the box.

....

(Total for Question 20 is 3 marks)

P 7 2 4 3 5 A 0 2 3 2 8

21 Shane bought a car.

The amount Shane paid for the car was $32 000

Theresa also bought a car.
To pay for this car, Theresa paid a deposit of $18 000 together with 14 monthly payments of $1160

Theresa paid more for her car than Shane paid for his car.

(a) Work out how much more Theresa paid as a percentage of the amount Shane paid.

....%

(4)

Kylie bought a van.

After 1 year, the value of the van was $39 865
During this year, the value of the van decreased by 15%

(b) Work out the value of the van when Kylie bought it.

$...

(3)

(Total for Question 21 is 7 marks)

22 Some members of a library were asked to name the type of book that they each liked to read the best.

One of the members is chosen at random.
The table shows information about the probability of the type of book that this member answered.

Type of book	comedy	romance	mystery	thriller
Probability	0.24	0.40	$3x$	x

48 members answered comedy books.

Work out how many of the members answered mystery books.

....

(Total for Question 22 is 4 marks)

Turn over ▶

23 The diagram shows a triangle *ABC* inside a semicircle.

Diagram **NOT**
accurately drawn
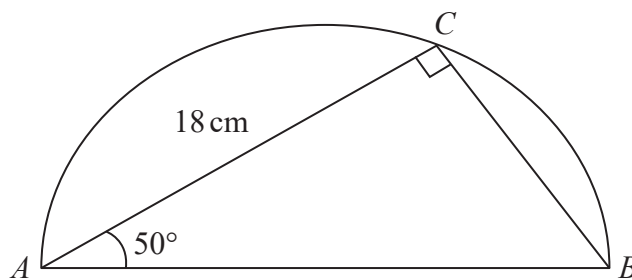
A, *B* and *C* are points on the semicircle.

AB is the diameter of the semicircle.

Angle *ACB* = 90°
Angle *BAC* = 50°
AC = 18 cm

Work out the perimeter of the semicircle.
Give your answer correct to 2 significant figures.

.... cm

(Total for Question 23 is 5 marks)

24 (a) Write 6.25×10^{-4} as an ordinary number.

....

(1)

(b) Work out $(2.4 \times 10^{12}) \div (9.6 \times 10^{4})$
Give your answer in standard form.

....

(2)

(Total for Question 24 is 3 marks)

25 (a) Factorise $y^2 - 2y - 48$

....

(2)

(b) Write down the inequality shown on the number line

....
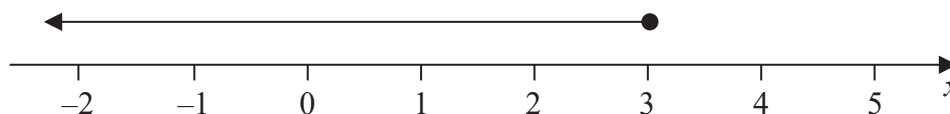
(1)

(c) Solve the inequality $7w + 6 > 12w + 14$

....

(3)

(Total for Question 25 is 6 marks)

TOTAL FOR PAPER IS 100 MARKS