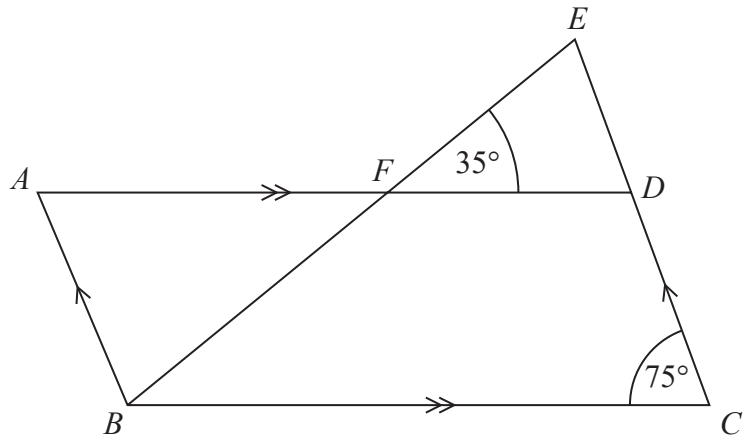
Autumn 2017 Paper 1 Q3

1



ABCD is a parallelogram.
EDC is a straight line.
F is the point on *AD* so that *BFE* is a straight line.

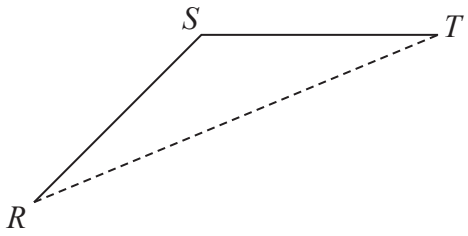
Angle *EFD* = 35°
Angle *DCB* = 75°

Show that angle *ABF* = 70°
Give a reason for each stage of your working.

(Total for Question 1 is 4 marks)

Autumn 2017 Paper 2 Q12

2



RS and *ST* are 2 sides of a regular 12-sided polygon.
RT is a diagonal of the polygon.

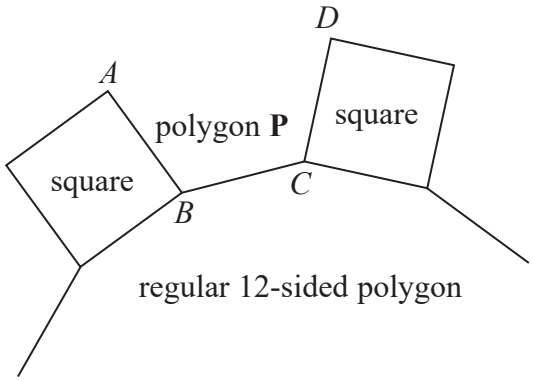
Work out the size of angle *STR*.
You must show your working.

.....°

(Total for Question 2 is 3 marks)

Summer 2017 Paper 3 Q5

3 In the diagram, *AB*, *BC* and *CD* are three sides of a regular polygon **P**.

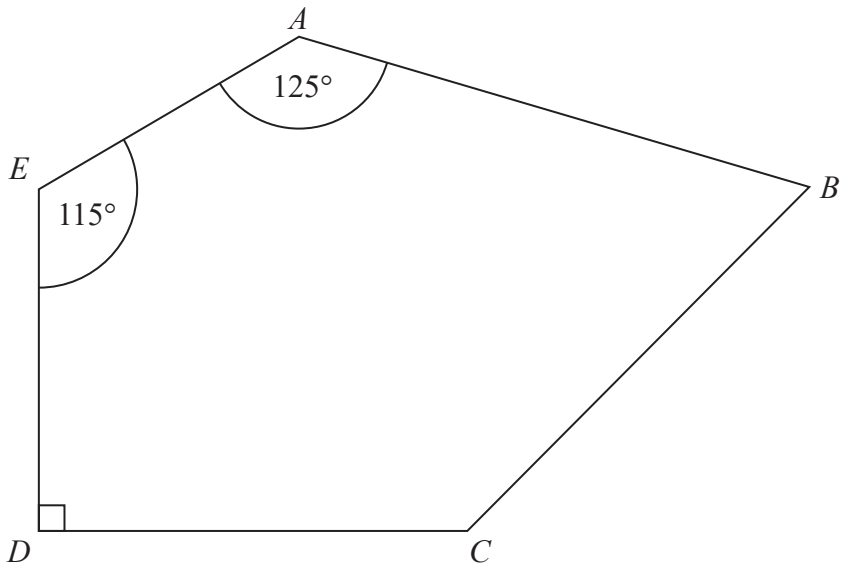


Show that polygon **P** is a hexagon.
You must show your working.

(Total for Question 3 is 4 marks)

Summer 2018 Paper 3 Q8

4 *ABCDE* is a pentagon.



Angle *BCD* = 2 × angle *ABC*

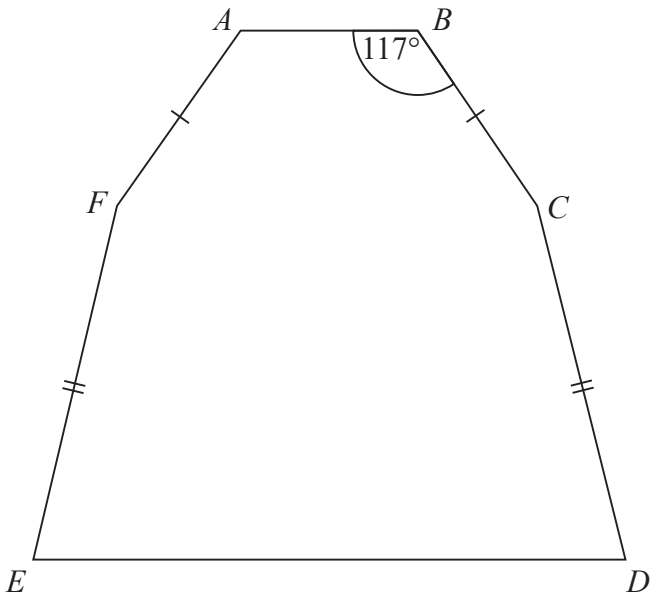
Work out the size of angle *BCD*.
You must show all your working.

.....°

(Total for Question 4 is 5 marks)

Summer 2019 Paper 3 Q5

5 The diagram shows a hexagon.
The hexagon has one line of symmetry.



$FA = BC$
$EF = CD$
Angle $ABC = 117°$

Angle $BCD = 2 \times$ angle CDE

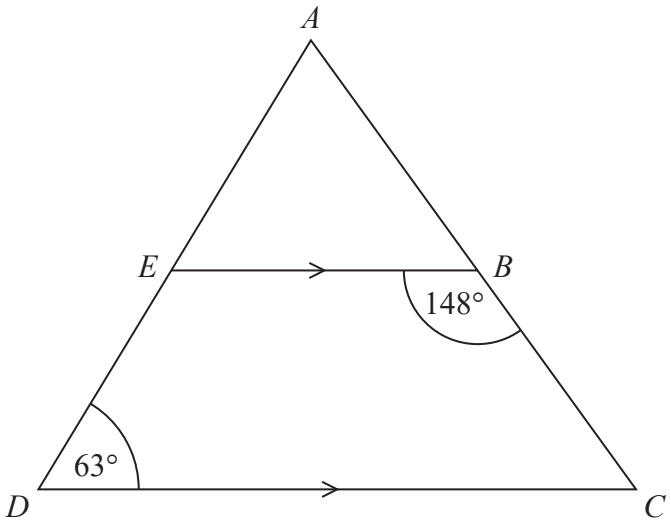
Work out the size of angle AFE.
You must show all your working.

.....°

(Total for Question 5 is 4 marks)

Summer 2020 Paper 1 Q6

6 *ADC* is a triangle.



AED and *ABC* are straight lines.
EB is parallel to *DC*.

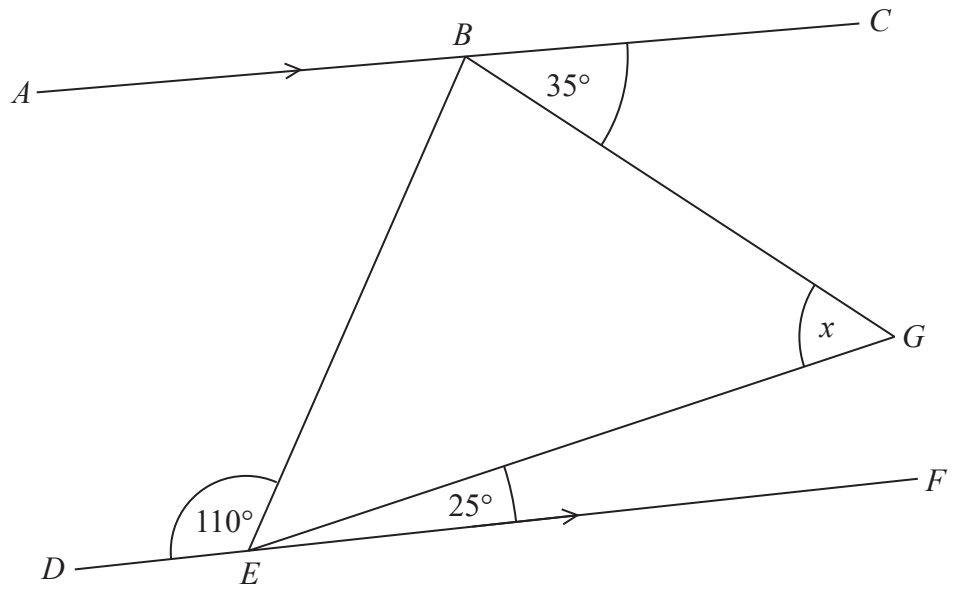
Angle *EBC* = 148°
Angle *ADC* = 63°

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

(Total for Question 6 is 5 marks)

Autumn 2018 Paper 2 Q3

7 *BEG* is a triangle.



ABC and *DEF* are parallel lines.

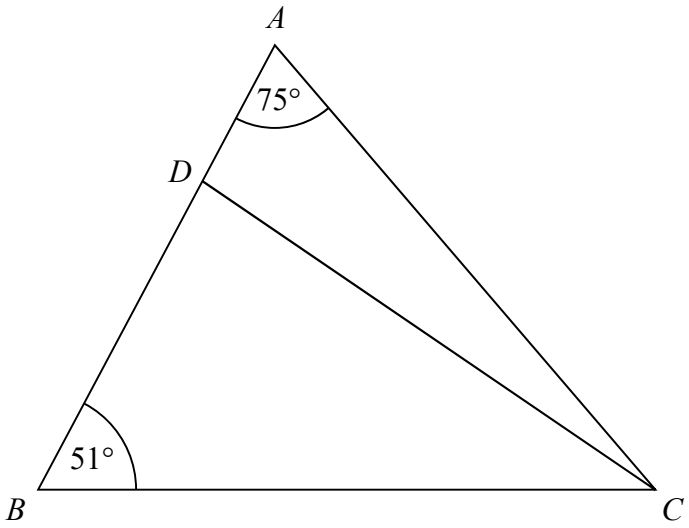
Work out the size of angle *x*.
Give a reason for each stage of your working.

.....°

(Total for Question 7 is 4 marks)

Autumn 2019 Paper 1 Q5

8 The diagram shows triangle *ABC*.



ADB is a straight line.

the size of angle *DCB* : the size of angle *ACD* = 2 : 1

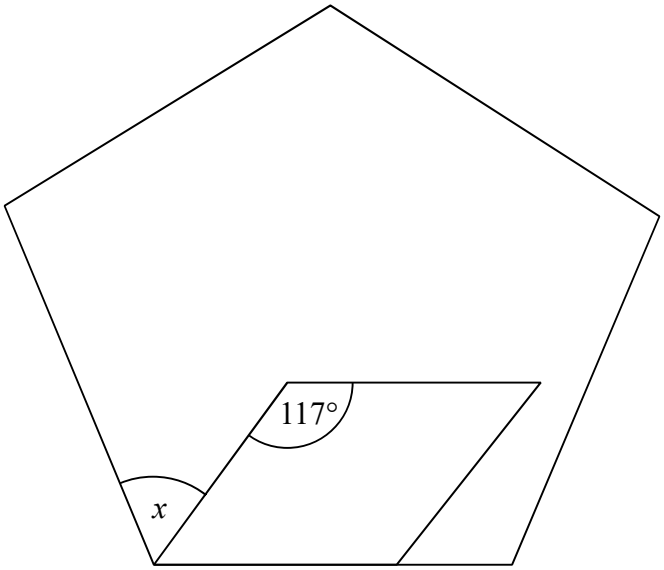
Work out the size of angle *BDC*.

.....°

(Total for Question 8 is 4 marks)

Autumn 2019 Paper 3 Q8

9 The diagram shows a regular pentagon and a parallelogram.



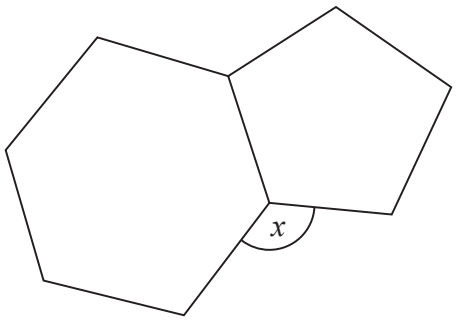
Work out the size of the angle marked x.
You must show all your working.

.....°

(Total for Question 9 is 4 marks)

Summer 2022 Paper 1 Q5

10 Here is a regular hexagon and a regular pentagon.



Work out the size of the angle marked x.
You must show all your working.

.....°

(Total for Question 10 is 3 marks)