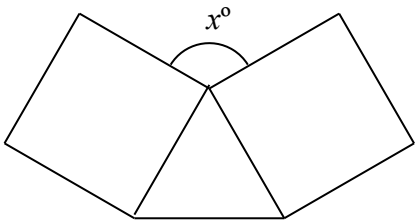
POLYGONS

MULTI-STEP PROBLEMS

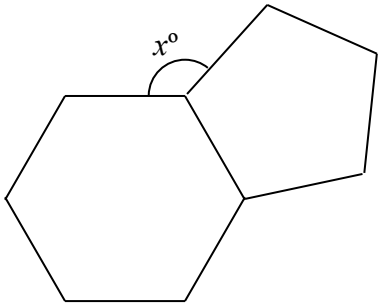
Ref: G424. 4C1

A1 The diagram shows an equilateral triangle and two squares.



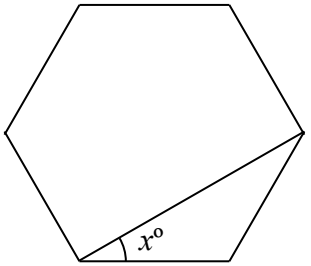
Work out the value of x.

A2 The diagram shows a regular pentagon and a regular hexagon.



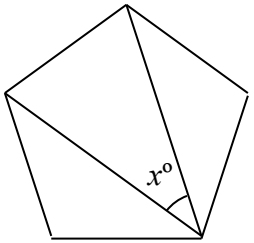
Work out the value of x.

A3 The diagram shows a regular hexagon.



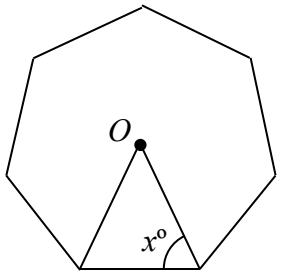
Find the value of x.
Show clear working out.

B1 The diagram shows a regular pentagon.



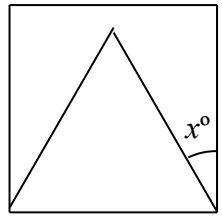
Find the value of x.
Show clear working out.

B2 The diagram shows a regular heptagon with centre O.



Work out the value of x.

B3 The diagram shows an equilateral triangle inside a square.



Work out the value of x.

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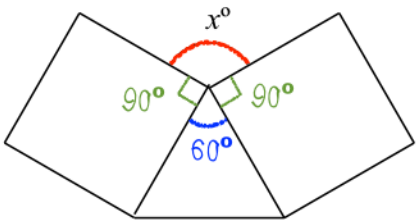
POLYGONS

MULTI-STEP PROBLEMS

Ref: G424. 4C1

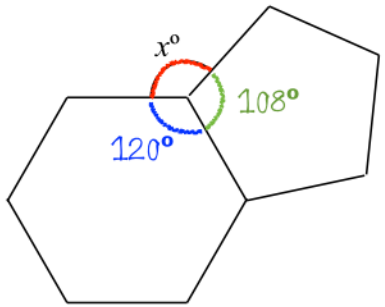
A1 The diagram shows an equilateral triangle and two squares.



$x = 360 - (90 + 60 + 90)$

$= 120°$

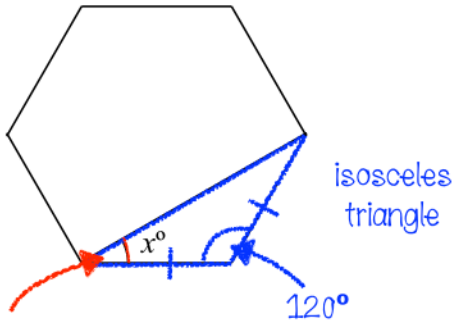
A2 The diagram shows a regular pentagon and a regular hexagon.



$x = 360 - (120 + 108)$

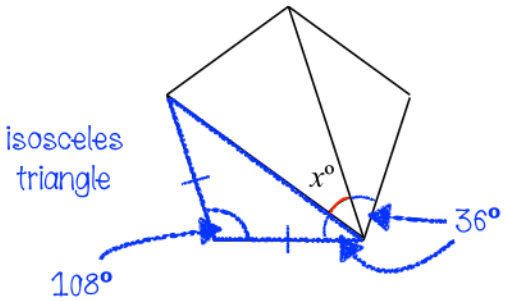
$= 132°$

A3 The diagram shows a regular hexagon.



$\frac{180 - 120}{2} = 30°$

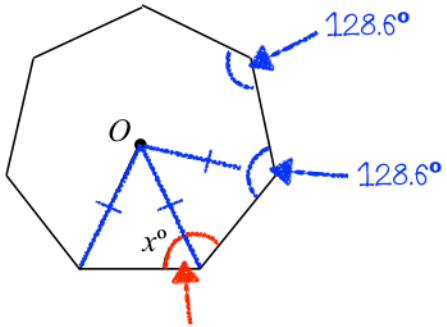
B1 The diagram shows a regular pentagon.



$x = 108 - 2 \times 36$

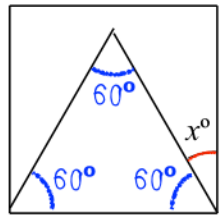
$= 36°$

B2 The diagram shows a regular heptagon with centre O.



$\frac{128.6°}{2} = 64.3°$

B3 The diagram shows an equilateral triangle inside a square.



$x = 90 - 60$

$= 30°$

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