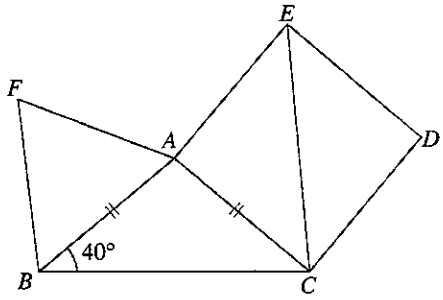
5. In the diagram, $AB = AC$, $ACDE$ is a square, $\triangle ABF$ is an equilateral triangle and $\angle ABC = 40°$. Find

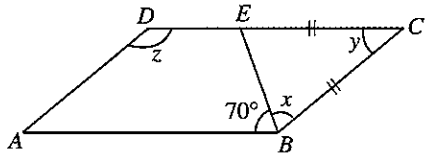
(a) $\angle BAC$,

(b) $\angle FAE$,

(c) $\angle BCE$.



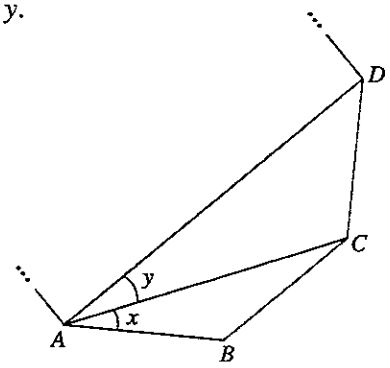
6. In the diagram, $ABCD$ is a parallelogram. E is a point on CD such that $BC = EC$ and $\angle ABE = 70°$. Find the angles x, y and z.



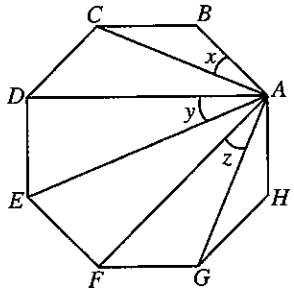
7. Each interior angle of a regular polygon is 140°.

(a) Find the number of sides of this regular polygon.

(b) The diagram shows the sides AB, BC and CD of the polygon. Find the angles x and y.



8. In the diagram, $ABCDEFGH$ is a regular octagon. Find the angles x, y and z.



9. $\triangle ABC$ is an isosceles triangle. $AB = AC$, D and E are two points on BC such that $BD = CE$, $\angle ABC = 46°$ and $\angle ADC = 70°$.

(a) Show that $\triangle ABD \equiv \triangle ACE$.

(b) Find $\angle DAE$.

(c) Find $\angle EAC$.