

Properties of Special Triangles

1) ABC is a triangle.

a) Find the size of angle A .

b) Triangle ABC is equilateral.

Explain why.

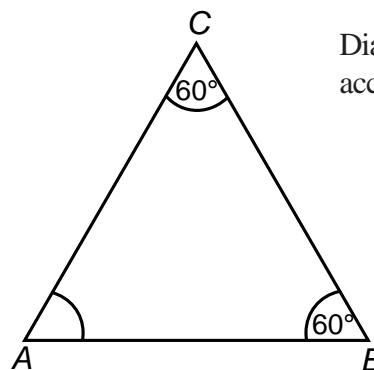


Diagram **NOT** accurately drawn

2) BCD is a triangle.

ABC is a straight line.

Angle $CBD = 70^\circ$.

$BD = CD$.

a) (i) Work out the value of x .

(ii) Give a reason for your answer.

b) (i) Work out the value of y .

(ii) Give reasons for your answer.

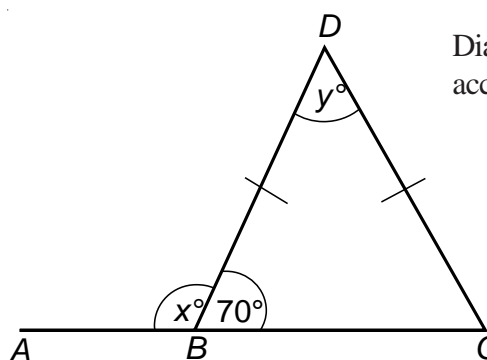


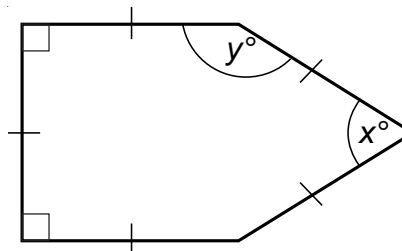
Diagram **NOT** accurately drawn

3) The diagram shows a 5-sided shape.

All the sides of the shape are equal in length.

a) (i) Find the value of x .

(ii) Give a reason for your answer.



b) (i) Work out the value of y .

(ii) Explain your answer.