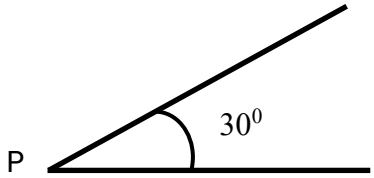
Q1.

(a) 120^0

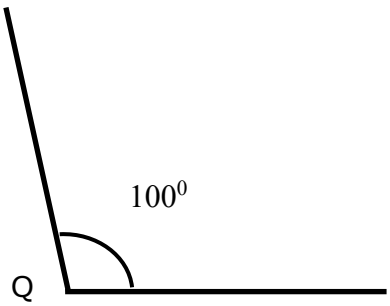
(b)

Mathematical Name	Angle
Acute Angle	S
Obtuse Angle	R
Right Angle	P
Reflex Angle	Q

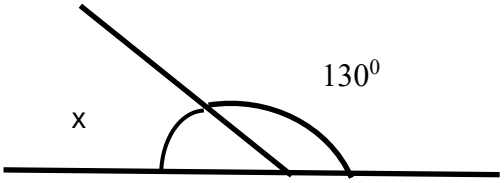
Q2.



Q3.



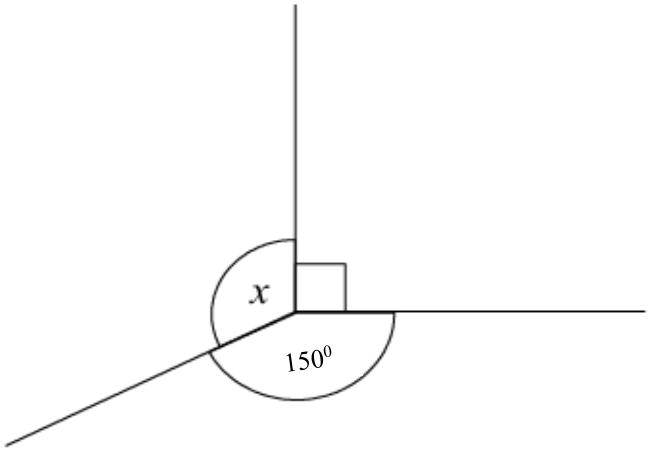
Q4.



$X = 180^0 - 130^0$

$X = 50^0$

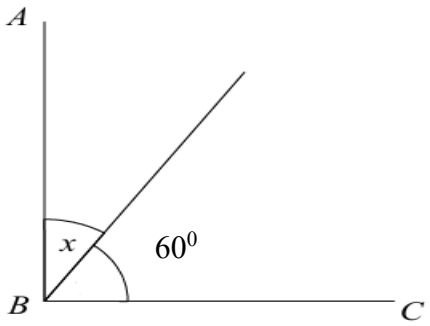
Q5.



$X = 360^0 - (150^0 + 90^0)$

$X = 120^0$

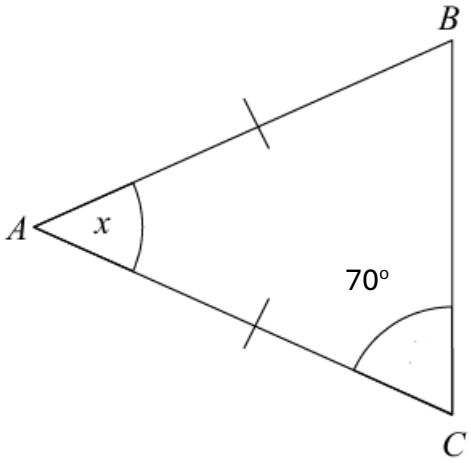
Q6.



$X = 90^0 - 60^0$

$X= 30^0$

Q7.

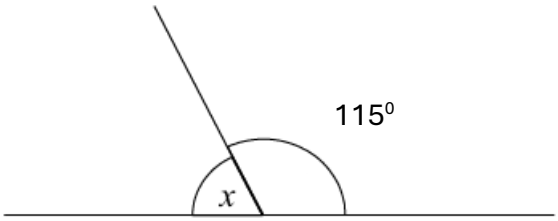


Sum of all angles of triangle = 180^{O}

$X = 180^{0} - (70^{0} + 70^{0})$

$X = 40^{0}$

Q8.



(a)

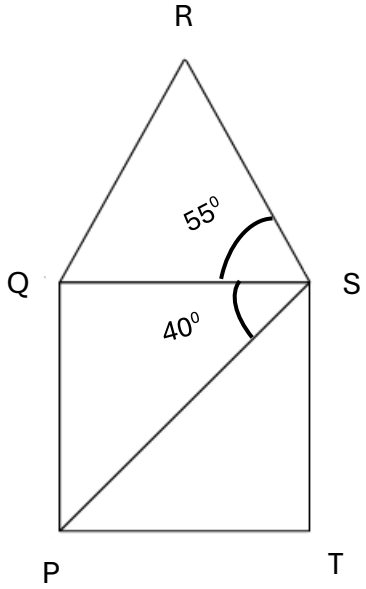
Sum of all angles of triangle = 180^{O}

$X = 180^{0} - 115^{0}$

$X = 65^{0}$

(b) Angles on a straight line makes 180^{0}

Q9.

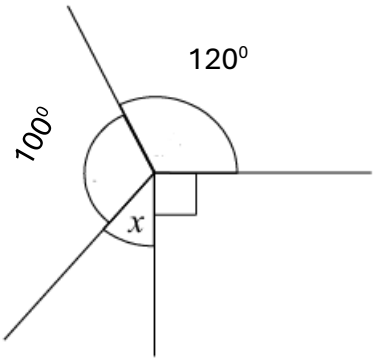


(a) 90^0

(b) 55^0

(c) $40^0 + 55^0 = 95^0$

Q10.



(a)

Angles around a point = 360^O

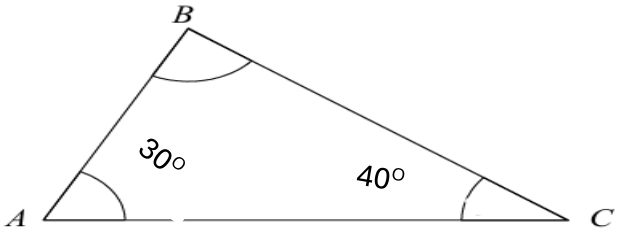
$X = 360^o – (100^o + 120^o + 90^o)$

$X = 360^O - 310^O$

$X = 50^O$

(b) Angles on a straight line makes 180^o

Q11.



(a)

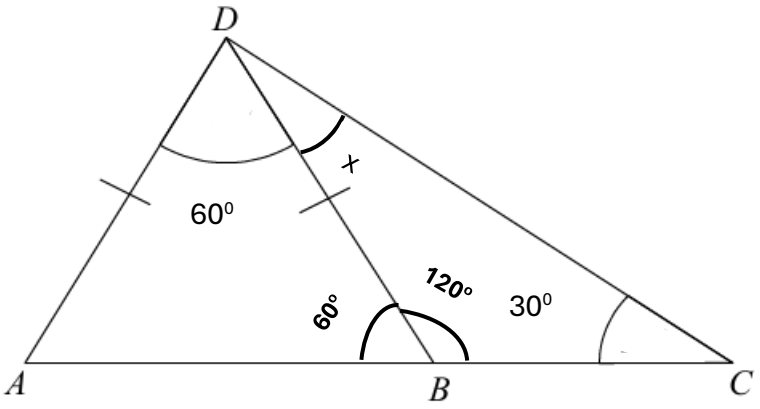
Sum of angles of a triangle= 180^0

$X = 180^0 – (30^0 + 40^0)$

$X = 110^0$

(b) Sum of angles of a triangle= 180^0

Q12.



Sum of angles of a triangle ADB= 180^0

$180^0 - 60^0$

Sum of angles of a triangle ADB= 180^0

$180^0 - 60^0$

120^O

As 120^o is the sum of remaining two angles and opposite sides are equal. So, both angles must be equal.

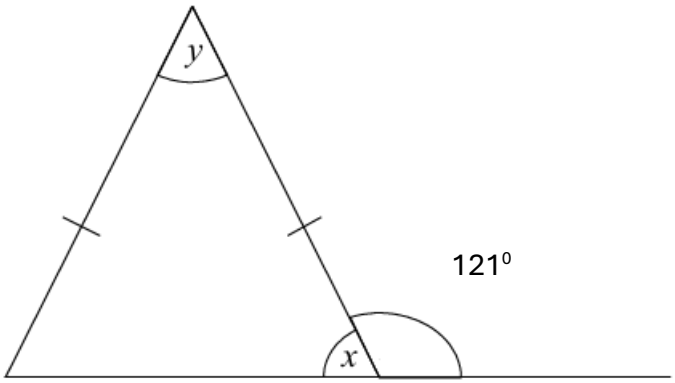
$120 \div 2 = 60$

$180^0 - 60^0 = 120^0$

$X = 180^0 - (120^0 + 30^0)$

$X = 30^0$

Q13.



(a)

$$X = 180^0 - 121^0$$

$$X = 59^0$$

(b)

Opposite sides are equal so, opposite angles must be same.

$$Y = 180^0 - (59^0 + 59^0)$$

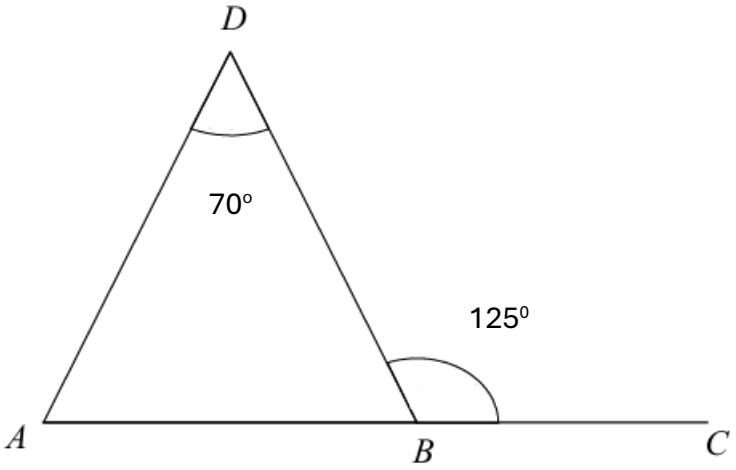
$$Y = 62^0$$

(c)

Opposite sides are equal, so opposite angles are equal.

Sum of interior angles of a triangle = 180^0

Q14.



Show that ABD is an isosceles triangle.

$$180^0 - 125^0 = 55^0$$

ABD = 55^0 (Angles on a straight line is 180^0)

$$55^0 + 70^0 = 125^0$$

$$180^0 - 125^0 = 55^0$$

DAB = 55^0 (Sum of interior angles of a triangle = 180^0)

Two angles are equal, so this is Isosceles Triangle.