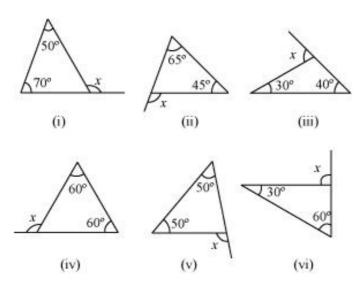


NCERT Solutions For Class 7 Maths The Triangle and its Properties Exercise 6.2

Q1. Find the value of the unknown exterior angle *x* in the following diagrams:



Ans:

(i)
$$x = 50^{\circ} + 70^{\circ}$$
 (Exterior angle theorem)

$$x = 120^{\circ}$$

(ii)
$$x = 65^{\circ} + 45^{\circ}$$
 (Exterior angle theorem)

(iii)
$$x = 40^{\circ} + 30^{\circ}$$
 (Exterior angle theorem)

(iv)
$$x = 60^{\circ} + 60^{\circ}$$
 (Exterior angle theorem)

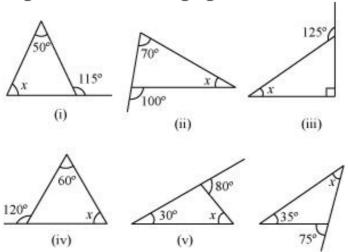
$$= 120^{\circ}$$

(v)
$$x = 50^{\circ} + 50^{\circ}$$
 (Exterior angle theorem)

$$= 100^{\circ}$$

(vi)
$$x = 30^{\circ} + 60^{\circ}$$
 (Exterior angle theorem)
= 90°

Q2. Find the value of the unknown interior angle *x* in the following figures:



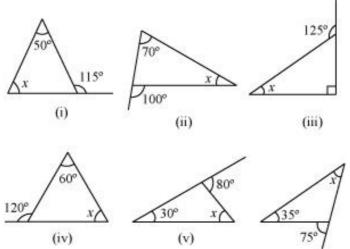
Ans:

(i) $x + 50^{\circ} = 115^{\circ}$ (Exterior angle theorem)

$$x = 115^{\circ} - 50^{\circ} = 65^{\circ}$$

(vi)
$$x = 30^{\circ} + 60^{\circ}$$
 (Exterior angle theorem)
= 90°

Q2. Find the value of the unknown interior angle *x* in the following figures:



Ans:

(i) $x + 50^{\circ} = 115^{\circ}$ (Exterior angle theorem)

$$x = 115^{\circ} - 50^{\circ} = 65^{\circ}$$

********* END ********