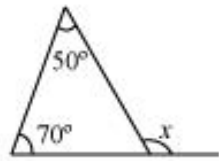


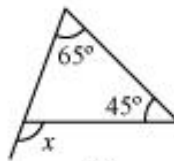


NCERT Solutions For Class 7 Maths The Triangle and its Properties  
Exercise 6.2

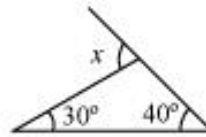
**Q1.** Find the value of the unknown exterior angle  $x$  in the following diagrams:



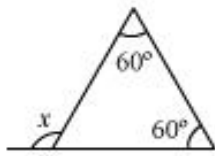
(i)



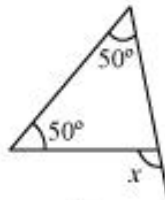
(ii)



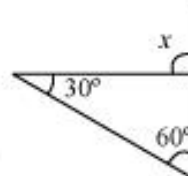
(iii)



(iv)



(v)



(vi)

**Ans:**

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

$x = 120^\circ$

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

$= 110^\circ$

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

$= 70^\circ$

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

$= 120^\circ$

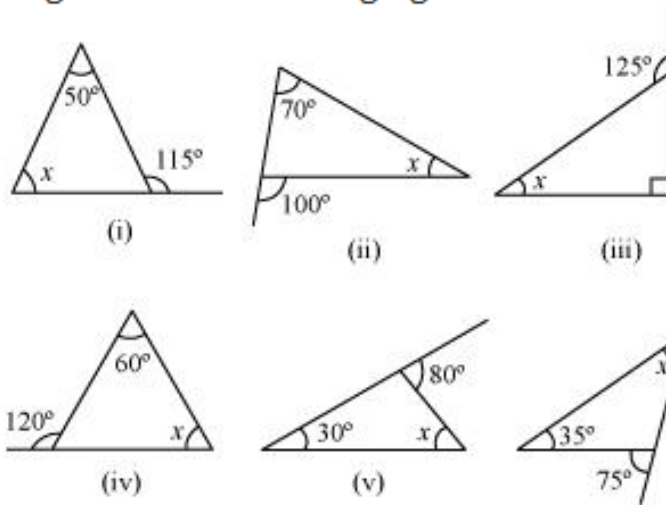
(v)  $x = 50^\circ + 50^\circ$  (Exterior angle theorem)

$= 100^\circ$

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

$$= 90^\circ$$

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



**Ans:**

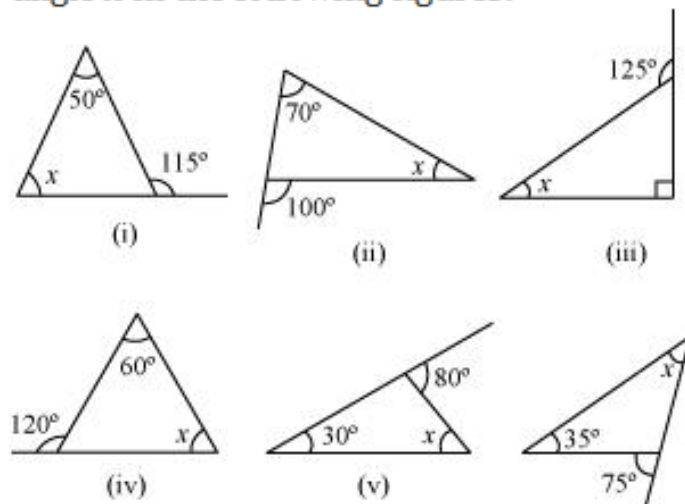
$$(i) x + 50^\circ = 115^\circ \text{ (Exterior angle theorem)}$$

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

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

$$= 90^\circ$$

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



**Ans:**

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

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

\*\*\*\*\* END \*\*\*\*\*

