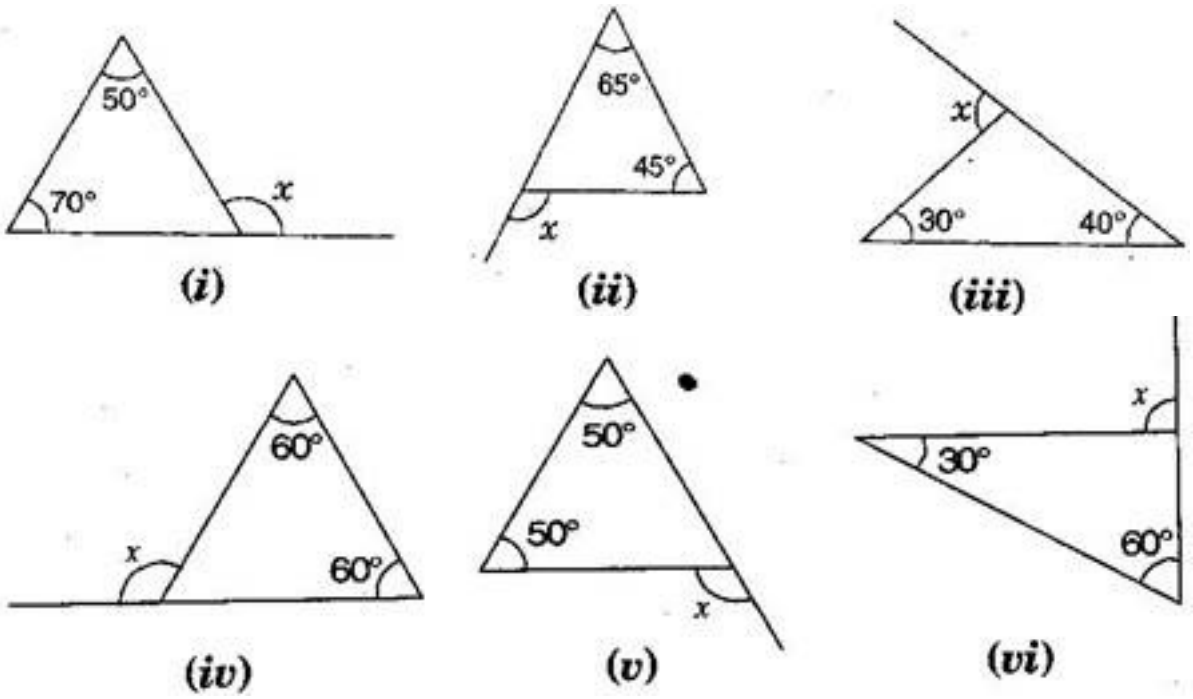
CBSE Class –VII Mathematics

NCERT Solutions

Chapter 6 The Triangle and its Properties (Ex. 6.2)

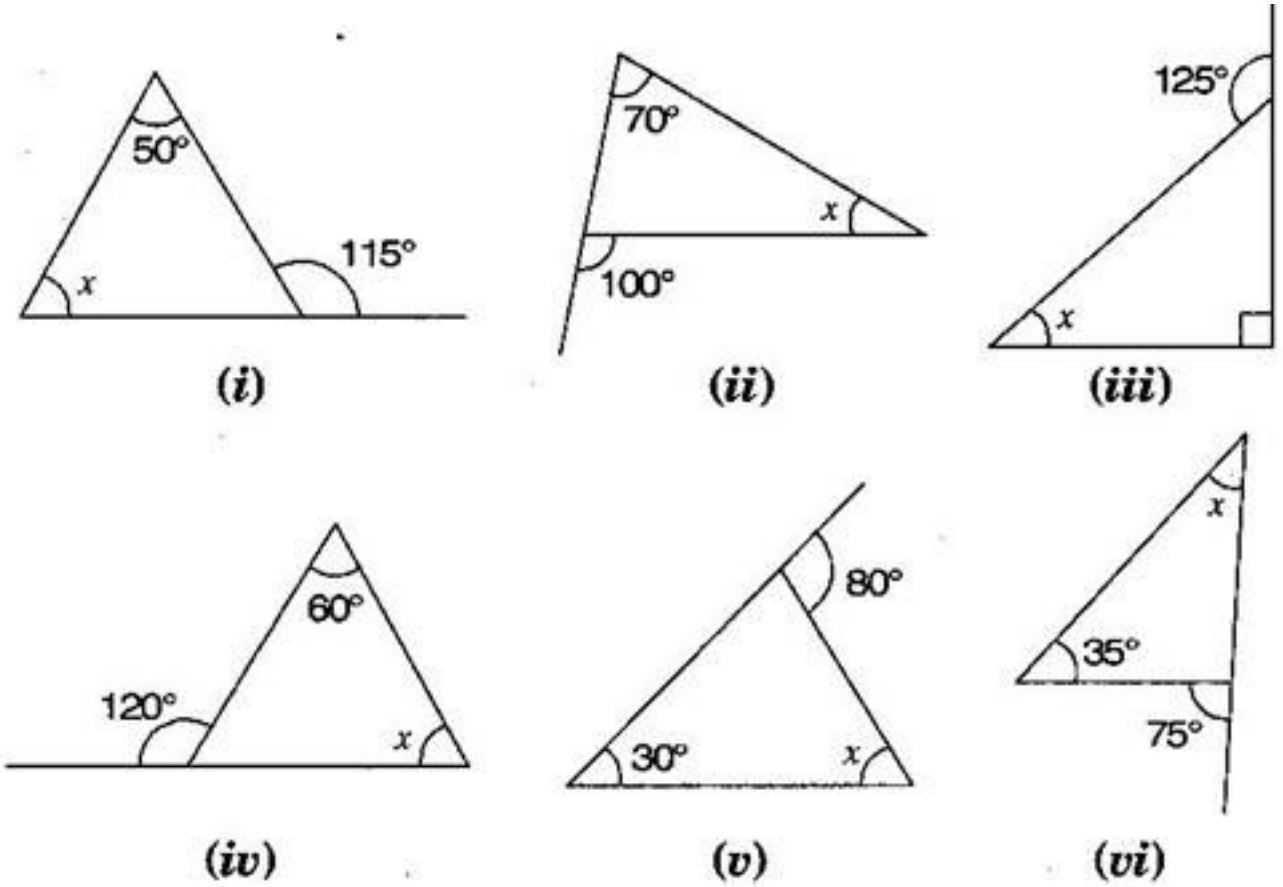
Question 1. Find the value of the unknown exterior angle x in the following diagrams:



Answer: Since, Exterior angle = Sum of opposite interior angles, therefore

1. $x = 50^\circ + 70^\circ = 120^\circ$
2. $x = 65^\circ + 45^\circ = 110^\circ$
3. $x = 30^\circ + 40^\circ = 70^\circ$
4. $x = 60^\circ + 60^\circ = 120^\circ$
5. $x = 50^\circ + 50^\circ = 100^\circ$
6. $x = 60^\circ + 30^\circ = 90^\circ$

Question 2. Find the value of the unknown interior angle x in the following figures:



Answer: Since, Exterior angle = Sum of opposite interior angles, therefore

1. $x + 50^\circ = 115^\circ \Rightarrow x = 115^\circ - 50^\circ = 65^\circ$
2. $70^\circ + x = 100^\circ \Rightarrow x = 100^\circ - 70^\circ = 30^\circ$
3. $x + 90^\circ = 125^\circ \Rightarrow x = 125^\circ - 90^\circ = 35^\circ$
4. $60^\circ + x = 120^\circ \Rightarrow x = 120^\circ - 60^\circ = 60^\circ$
5. $30^\circ + x = 80^\circ \Rightarrow x = 80^\circ - 30^\circ = 50^\circ$
6. $x + 35^\circ = 75^\circ \Rightarrow x = 75^\circ - 35^\circ = 40^\circ$