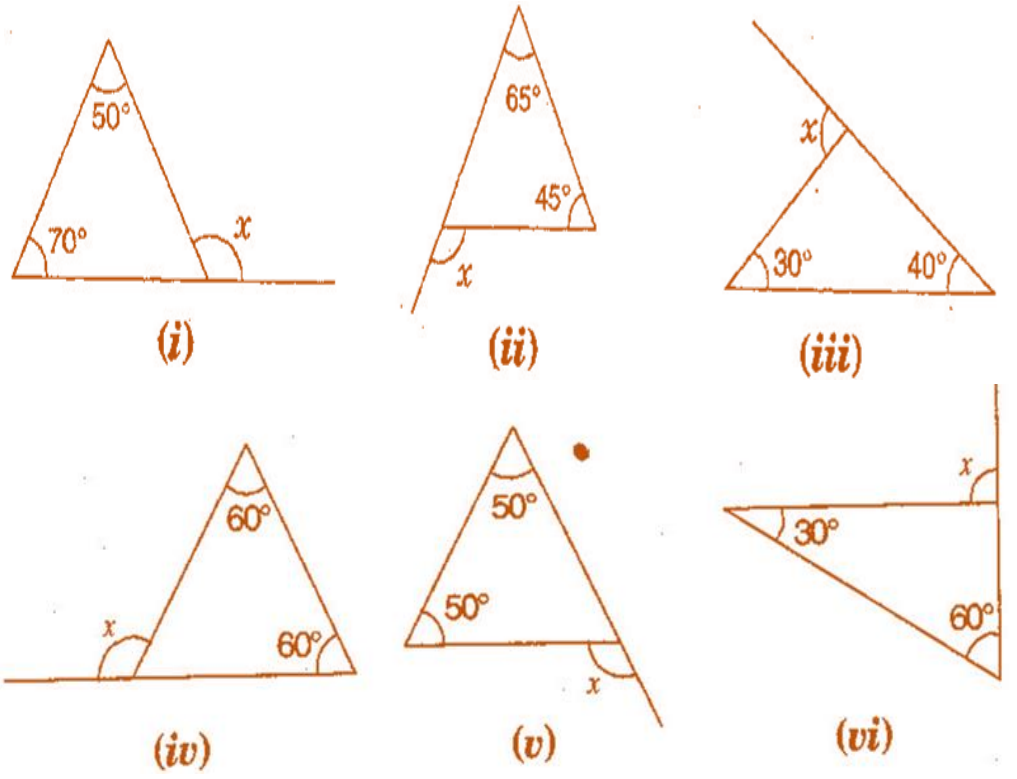
Exercise 6.2

Question 1:

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



Answer 1:

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

(i) $x = 50° + 70° = 120°$

(ii) $x = 65° + 45° = 110°$

(iii) $x = 30° + 40° = 70°$

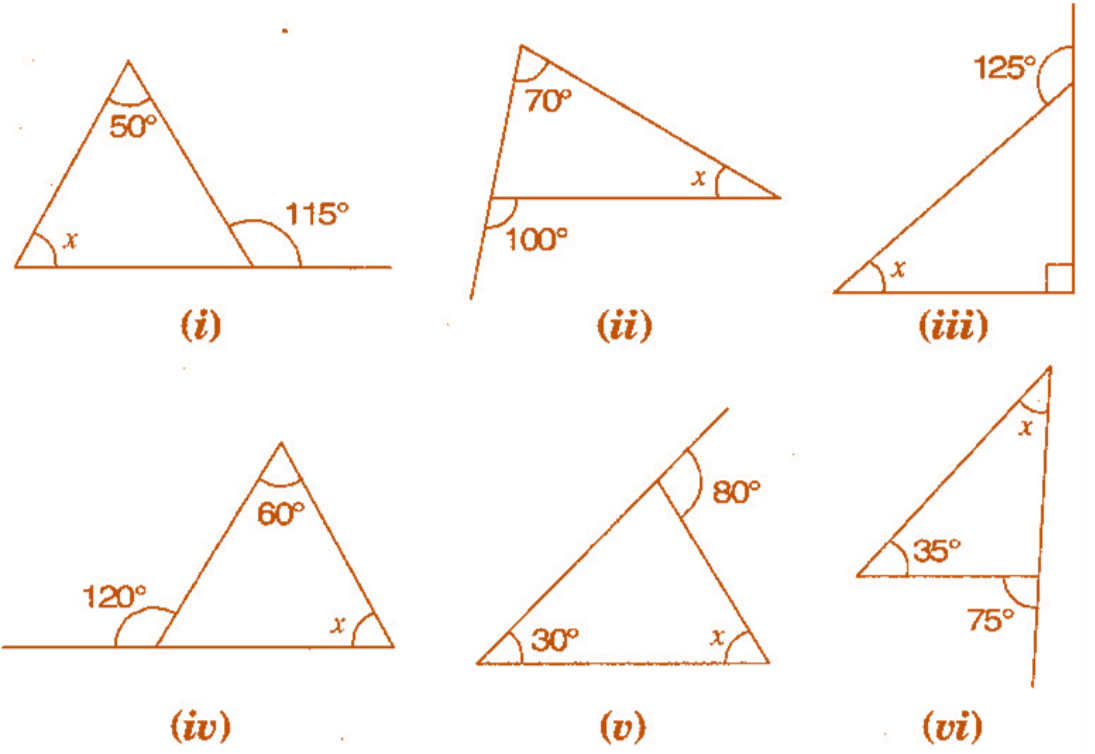
(iv) $x = 60° + 60° = 120°$

(v) $x = 50° + 50° = 100°$

(vi) $x = 60° + 30° = 90°$

Question 2:

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



Answer 2:

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

(i) $x+50°=115° \Rightarrow x=115°-50°=65°$

(ii) $70°+x=100° \Rightarrow x=100°-70°=30°$

(iii) $x+90°=125° \Rightarrow x=120°-90°=35°$

(iv) $60°+x=120° \Rightarrow x=120°-60°=60°$

(v) $30°+x=80° \Rightarrow x=80°-30°=50°$

(vi) $x+35°=75° \Rightarrow x=75°-35°=40°$