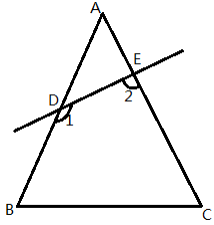
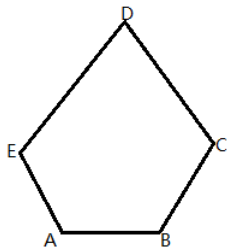


1. As in the graph, in  $\triangle ABC$ ,  $\angle A = 70^\circ$ , line DE intersect AB, AC at point D,E. Find the value of  $\angle 1 + \angle 2$ .

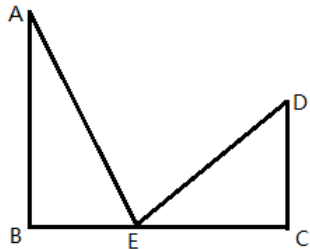


2. As in the graph, ABCDEF is pentagon. Prove that  $\angle A + \angle B + \angle C + \angle D + \angle E = 540^\circ$

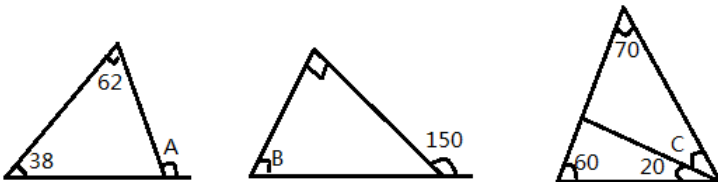


3. As in the graph, E is a point on line BC.  $\angle A = \angle DEC$ ,  $\angle D = \angle BEA$ ,  $\angle A + \angle D = 90^\circ$ . Prove that

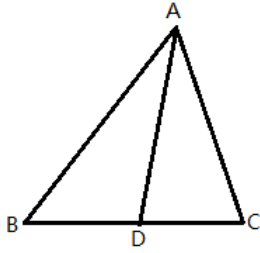
- (1)  $AE \perp DE$                       (2)  $AB \parallel CD$



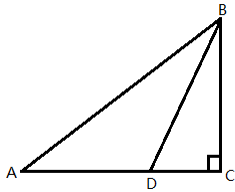
4. As in the graph, find the size of  $\angle A$ ,  $\angle B$ ,  $\angle C$



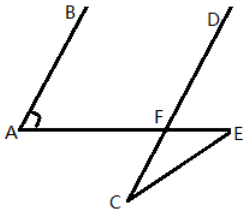
5. As in the graph, AD is the angular bisector of  $\angle BAC$ ,  $\angle B = \angle BAD$ ,  $\angle ADC = 80^\circ$ , then find the size of  $\angle B, \angle C$



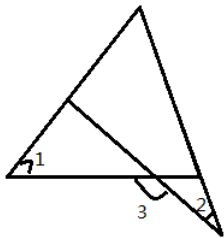
6. As in the right angled triangle,  $\angle C = 90^\circ$ ,  $\angle A = 20^\circ$ . If  $BD$  is the angular bisector of  $\angle ABC$ . Find the size of  $\angle BDC$



7. As in the graph,  $AB \parallel CD$ , AE intersect CD at point F.  $\angle A = 45^\circ$ ,  $\angle C = \angle E$ . Find the size of  $\angle C$



8. In the following graph, compare the size of  $\angle 1, \angle 2, \angle 3$ . Sort them by their sizes.



9. As in the graph, D is a point on edge BC,  $\angle ADC = \angle ACD$ . Prove that  $\angle ACB > \angle B$

