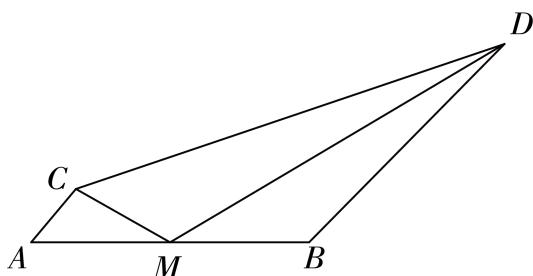
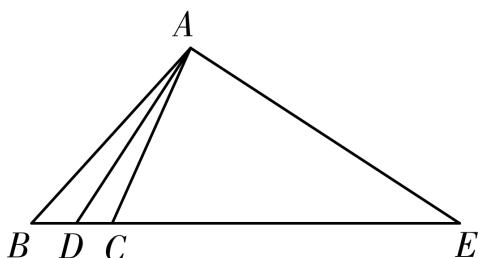


初二秋季四大自招班第八讲课前小测

- 1 如图， AC, BD 在 AB 的同侧， $AC = 2, BD = 8, AB = 8$ ，点 M 为 AB 的中点，若 $\angle CMD = 120^\circ$ ，则 CD 的最大值是_____.



- 2 如图，已知 $\angle BAD = \angle DAC = 12^\circ$, $AD \perp AE$, 且 $AB + AC = BE$, 则 $\angle B =$ _____°.



3 已知，点D是 $\triangle ABC$ 内一点，满足 $AD = AC$.

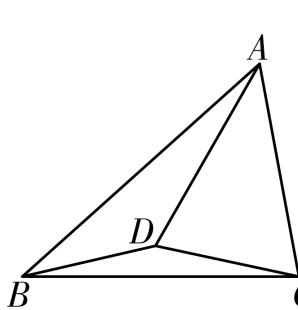


图1

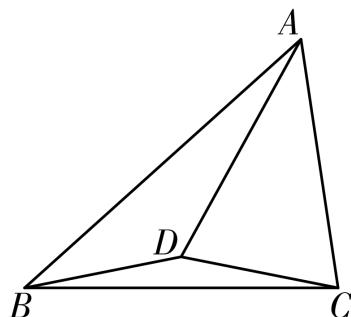


图2

- (1) 已知 $\angle CAD = 2\angle BAD$, $\angle ABD = 30^\circ$, 如图1 , 若 $\angle BAC = 60^\circ$, $\angle ACB = 80^\circ$, 请判断
 BD 和 CD 的数量关系 . (直接写出答案)
- (2) 如图2 , 若 $\angle ACB = 2\angle ABC$, $BD = CD$, 试证明 $\angle CAD = 2\angle BAD$.