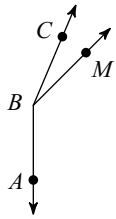


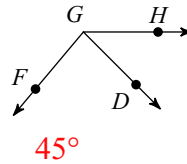
Unit 6.4 Angle Bisector, Angle Add. post. & Classifying Angles

- 1)  $m\angle CBA = 157^\circ$  and  $m\angle CBM = 22^\circ$ .  
Find  $m\angle MBA$ .



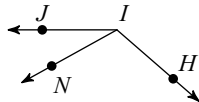
135°

- 2) Find  $m\angle HGD$  if  $m\angle DGF = 85^\circ$   
and  $m\angle HGF = 130^\circ$ .



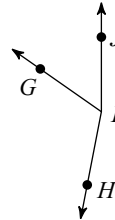
45°

- 3) Find  $x$  if  $m\angle NIJ = 3x - 7$ ,  
 $m\angle HIN = 9x + 2$ , and  $m\angle HIJ = 139^\circ$ .



12

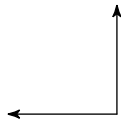
- 4) Find  $x$  if  $m\angle HIJ = 169^\circ$ ,  
 $m\angle HIG = 6 + 9x$ , and  $m\angle GIJ = 3x + 19$ .



12

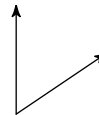
Classify each angle as acute, obtuse, right, or straight.

5)



right

6)



acute

7)



obtuse

8)



straight

9)  $25^\circ$

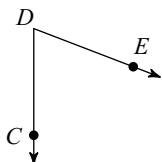
acute

10)  $103^\circ$

obtuse

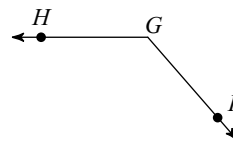
Name the vertex and sides of each angle.

11)



$D, \overrightarrow{DE}$  and  $\overrightarrow{DC}$

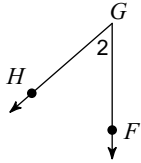
12)



$G, \overrightarrow{GF}$  and  $\overrightarrow{GH}$

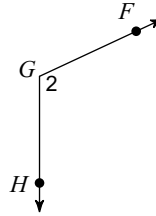
Name each angle in four ways.

13)



$\angle G, \angle 2, \angle FGH, \angle HGF$

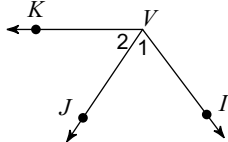
14)



$\angle G, \angle 2, \angle FGH, \angle HGF$

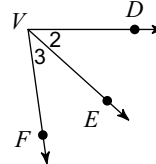
Name all the angles that have  $V$  as a vertex.

15)



$\angle 1, \angle 2, \angle IVK$

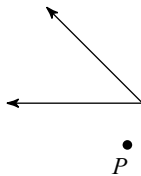
16)



$\angle 2, \angle 3, \angle DVF$

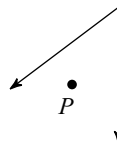
State if the given point is interior, exterior, or on the angle.

17)



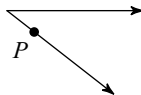
Exterior

18)



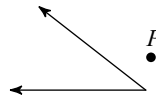
Interior

19)



On the angle

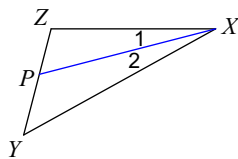
20)



Exterior

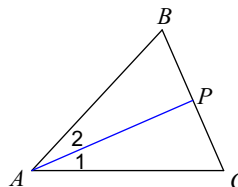
Each figure shows a triangle with one of its angle bisectors.

21) Find  $m\angle 2$  if  $m\angle ZXY = 28^\circ$ .



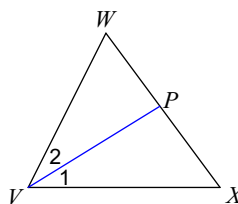
$14^\circ$

22)  $m\angle 1 = 2x + 9$  and  $m\angle 2 = 4x - 5$ .  
Find  $x$ .



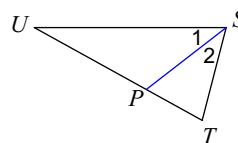
7

23) Find  $m\angle XVW$  if  $m\angle 1 = 6x - 5$  and  $m\angle XVW = 10x + 2$ .



$62^\circ$

24) Find  $m\angle 1$  if  $m\angle 1 = 6x + 2$  and  $m\angle 2 = 5x + 8$ .



$38^\circ$