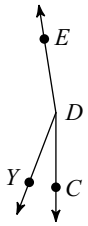
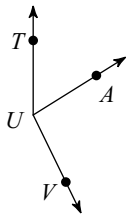
Math 1 Name_____

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

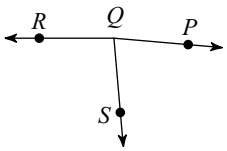
1) Find $m\angle CDY$ if $m\angle YDE = 150°$ and $m\angle CDE = 171°$.



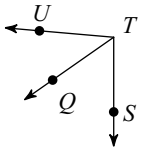
2) $m\angle TUA = 58°$ and $m\angle AUV = 96°$. Find $m\angle TUV$.



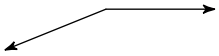
3) $m\angle PQR = 57x + 4$, $m\angle PQS = 25x + 5$, and $m\angle SQR = 95°$. Find x.



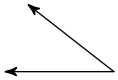
4) $m\angle STQ = 12x + 7$, $m\angle STU = 23x + 3$, and $m\angle QTU = 40°$. Find x.

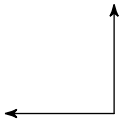


Classify each angle as acute, obtuse, right, or straight.

5) 

6) 

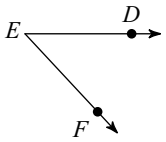
7) 

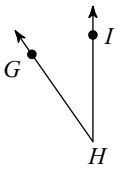
8) 

9) 126°

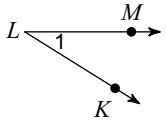
10) 37°

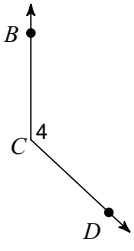
Name the vertex and sides of each angle.

11) 

12) 

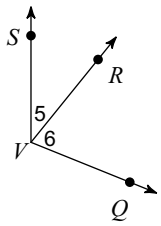
Name each angle in four ways.

13) 

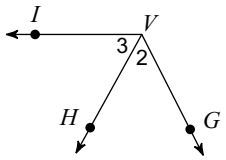
14) 

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

15)

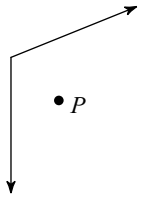


16)

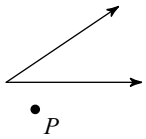


State if the given point is interior, exterior, or on the angle.

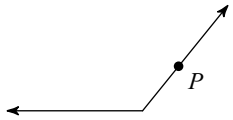
17)



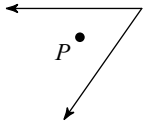
18)



19)

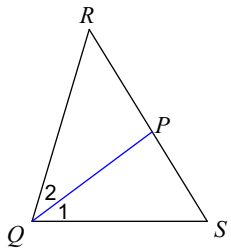


20)

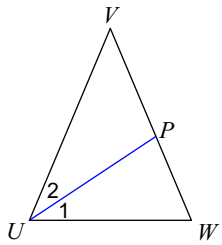


Each figure shows a triangle with one of its angle bisectors.

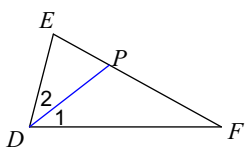
21) Find $m\angle SQR$ if $m\angle 2 = 36°$.



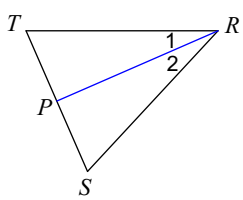
22) $m\angle 2 = 6x - 3$ and $m\angle 1 = 4x + 9$. Find x.



23) $m\angle 2 = 8x + 6$ and $m\angle 1 = 10x - 2$. Find $m\angle 1$.



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



Math 1 Name_____

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

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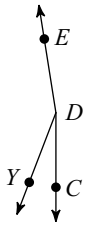
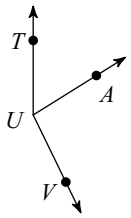


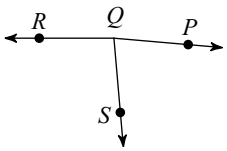
21°

2) $m\angle TUA = 58°$ and $m\angle AUV = 96°$. Find $m\angle TUV$.



154°

3) $m\angle PQR = 57x + 4$, $m\angle PQS = 25x + 5$, and $m\angle SQR = 95°$. Find x.



3

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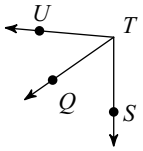
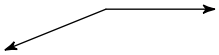


4

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

5)

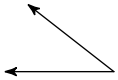


obtuse

6)

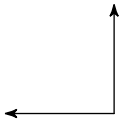
straight

7)



acute

8)



right

9) 126°

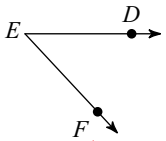
obtuse

10) 37°

acute

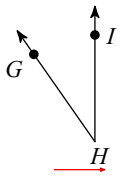
Name the vertex and sides of each angle.

11)



E, $\overrightarrow{ED}$ and $\overrightarrow{EF}$

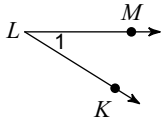
12)



H, $\overrightarrow{HG}$ and $\overrightarrow{HI}$

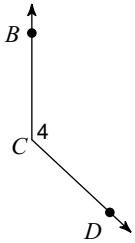
Name each angle in four ways.

13)



$\angle L$, $\angle 1$, $\angle MLK$, $\angle KLM$

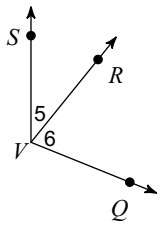
14)



$\angle C$, $\angle 4$, $\angle BCD$, $\angle DCB$

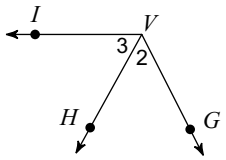
Name all the angles that have V as a vertex.

15)



$\angle 5, \angle 6, \angle SVQ$

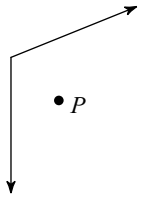
16)



$\angle 2, \angle 3, \angle GVI$

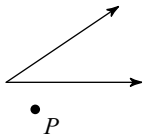
State if the given point is interior, exterior, or on the angle.

17)



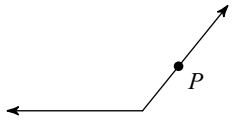
Interior

18)



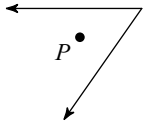
Exterior

19)



On the angle

20)



Interior

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

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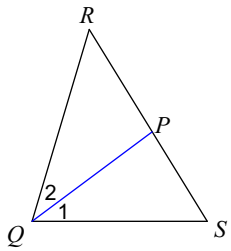
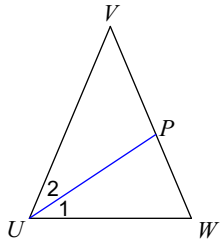


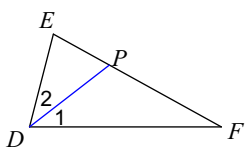
72°

22) $m\angle 2 = 6x - 3$ and $m\angle 1 = 4x + 9$. Find x.



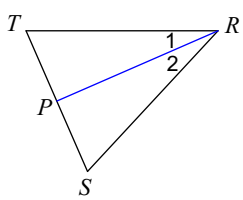
6

23) $m\angle 2 = 8x + 6$ and $m\angle 1 = 10x - 2$. Find $m\angle 1$.



38°

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



46°