Name_____

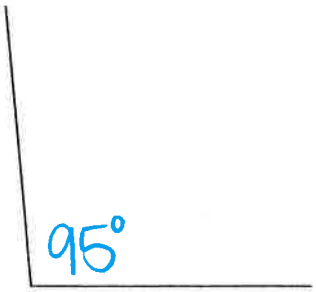
Angles and Their Measures

Date_____ Period____

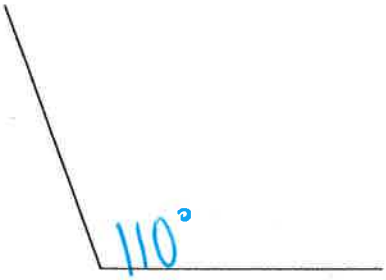
Find the measure of each angle to the nearest degree.

1)

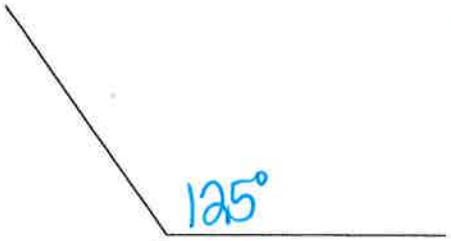
2)



3)

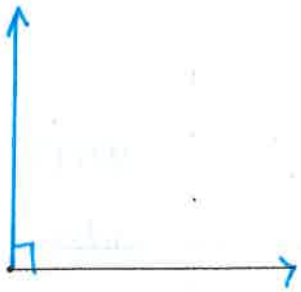


4)

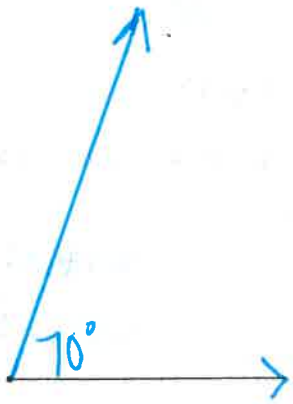


Draw an angle with the given measurement.

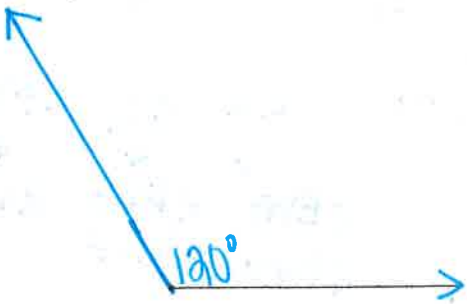
11) 90°



12) 70°



13) 120°



14) 105°

Name_____

Classifying Angles

Date_____ Period____

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

1)

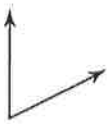
obtuse

2)

right

3)

obtuse

4) 

acute

15) 16°

acute

16) 180°

straight

17) 90°

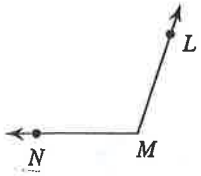
right

18) 97°

obtuse

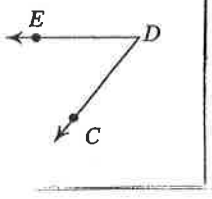
Naming Angles

Name the vertex and sides of each angle.

1) 

vertex: M

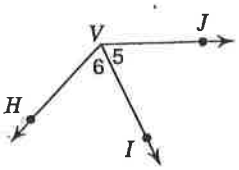
sides: $\overrightarrow{ML}$ and $\overrightarrow{MN}$

2) 

vertex: D

sides: $\overrightarrow{DE}$ and $\overrightarrow{DC}$

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

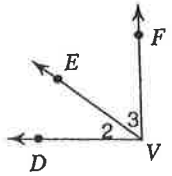
13) 

∠5, ∠6, ∠JVH

↓ ↓ ↓

∠JVI ∠IVH ∠HVJ

∠IVJ ∠HVI

14) 

∠2, ∠3, ∠FVD

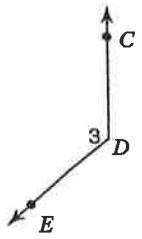
↓ ↓ ↓

∠EVD ∠FVE ∠DVF

∠DVE ∠EVF

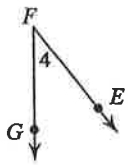
Name each angle in four ways.

5)



∠3
∠D
∠CDE
∠EDC

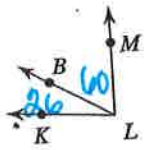
6)



∠4
∠F
∠EFG
∠GFE

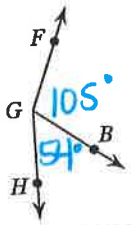
The Angle Addition Postulate

1) Find $m\angle KLM$ if $m\angle KLB = 26°$ and $m\angle BLM = 60°$.



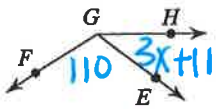
26 + 60 = 86
m∠KLM = 86°

2) Find $m\angle FGH$ if $m\angle FGB = 105°$ and $m\angle BGH = 54°$.



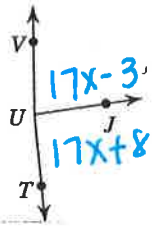
105 + 54 = 159°
m∠FGH = 159°

11) $m\angle HGF = 16x + 4$, $m\angle EGF = 110°$, and $m\angle HGE = 3x + 11$. Find x.



110 + 3x + 11 = 16x + 4
121 + 3x = 16x + 4
117 + 3x = 16x
117 = 13x
x = 9

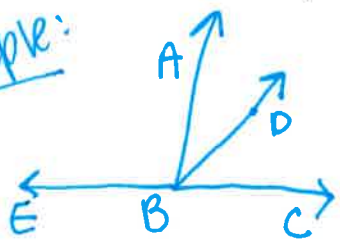
12) $m\angle VUT = 175°$, $m\angle VUJ = 17x - 3$, and $m\angle JUT = 17x + 8$. Find x.



17x - 3 + 17x + 8 = 175
34x + 5 = 175
34x = 170
x = 5

Critical thinking questions:

27) Draw a diagram with an acute angle ABC and an obtuse angle DBE so that point D is in the interior of angle ABC.

Various answers possible

Example: