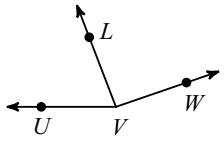
Basic Geometry A Name_____ ID: 1

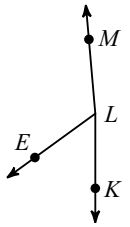
Activity 1-6 cumulative Review

1) Find x if $m\angle LVW = x + 100$, $m\angle UVW = 161°$, and $m\angle UVL = x + 77$.



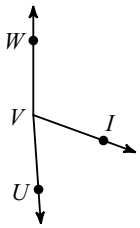
A) −8 B) −3
C) 9 D) −4

2) $m\angle KLE = 54°$, $m\angle ELM = 61x - 1$, and $m\angle KLM = 86x + 3$. Find x.



A) 8 B) −2
C) −8 D) 2

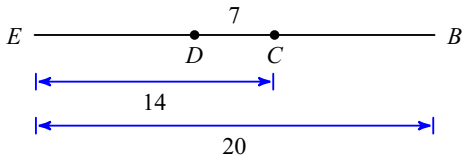
3) Find $m\angle WVI$ if $m\angle WVU = 176°$ and $m\angle IVU = 66°$.



A) 132° B) 135°
C) 138° D) 110°

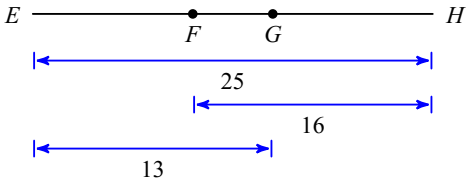
Find the length indicated.

4) Find DB



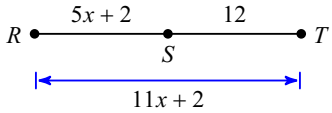
A) 7 B) 13
C) 10 D) None of these

5) Find FG

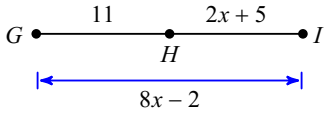


A) 4 B) 36
C) 3 D) 6

Solve for x.

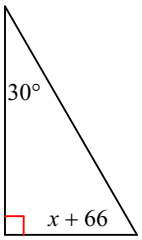
6) 

A) 1 B) None of these
C) −10 D) −5

7) 

A) 10 B) 3
C) −8 D) −4

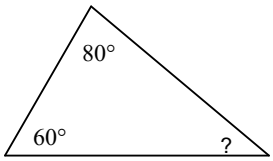
8)



A) 6 B) −7
C) None of these D) −6

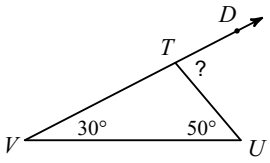
Find the measure of each angle indicated.

9)



A) 38° B) 35°
C) 32° D) 40°

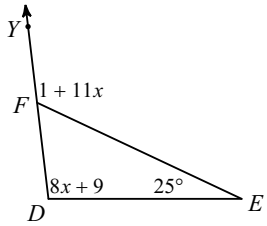
10)



A) 80° B) None of these
C) 87° D) 77°

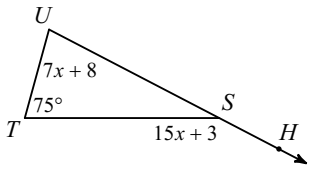
Solve for *x*.

11)



A) 11 B) 7
C) None of these D) 2

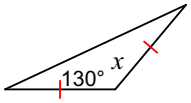
12)



A) 10 B) 6
C) 2 D) 9

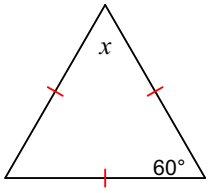
Find the value of *x*.

13)



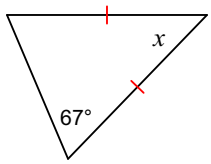
A) 23° B) 26°
C) 22° D) 25°

14)



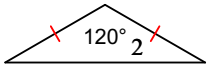
A) 57° B) 78°
C) 51° D) None of these

15)



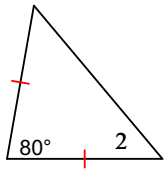
A) 57° B) 37°
C) 46° D) 49°

16) $m\angle 2 = 5x$



A) −11 B) 6
C) −6 D) None of these

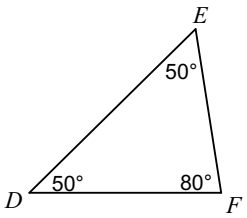
17) $m\angle 2 = 6x - 10$



A) 11 B) 9
C) 10 D) 6

Order the sides of each triangle from shortest to longest.

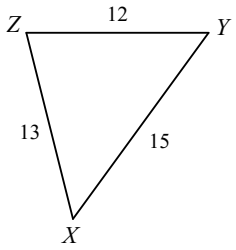
18)



A) $\overline{EF}$ and $\overline{DF}$; $\overline{DE}$
B) None of these
C) $\overline{EF}$ and $\overline{DE}$; $\overline{DF}$
D) $\overline{DE}$, $\overline{EF}$, $\overline{DF}$

Order the angles in each triangle from smallest to largest.

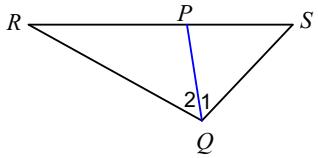
19)



A) $\angle Y, \angle X, \angle Z$
B) $\angle X, \angle Y, \angle Z$
C) $\angle Z, \angle Y, \angle X$
D) None of these

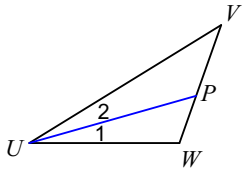
Each figure shows a triangle with one of its angle bisectors.

20) Find $m\angle 2$ if $m\angle SQR = 104°$.



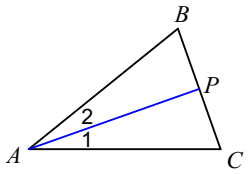
A) 52° B) 104°
C) None of these D) 26°

21) $m\angle 1 = 16°$. Find $m\angle WUV$.



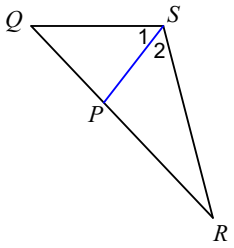
A) 48° B) 16°
C) 32° D) None of these

22) $m\angle 2 = 3x - 8$ and $m\angle CAB = 4x + 2$. Find x.



A) 9 B) 2
C) 5 D) 4

23) Find x if $m\angle 1 = 53x - 1$ and $m\angle 2 = 52x$.



A) 2 B) 8
C) 10 D) 1

Find the distance between each pair of points. Round your answer to the nearest tenth, if necessary.

24) $(3, 2), (-6, 4)$

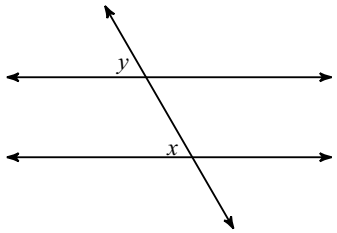
A) 3.3 B) 9.2
C) 6.7 D) 14.3

25) $(4, 6), (8, 4)$

A) None of these B) 4.5
C) 15.6 D) 2.4

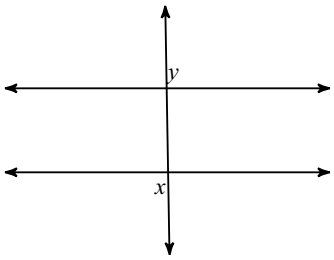
Identify each pair of angles as corresponding, alternate interior, alternate exterior, co-interior, vertical, or adjacent.

26)



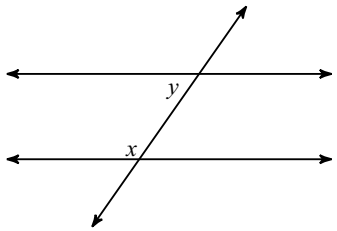
A) corresponding
B) alternate exterior
C) alternate interior
D) co-interior

27)



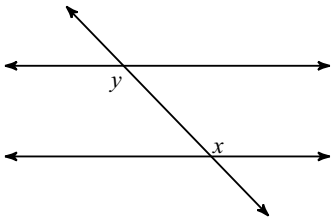
A) None of these
B) alternate exterior
C) corresponding
D) co-interior

28)



A) corresponding
B) co-interior
C) alternate interior
D) alternate exterior

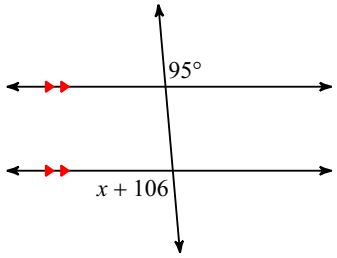
29)



A) corresponding
B) alternate interior
C) alternate exterior
D) co-interior

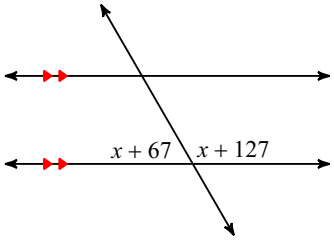
Solve for *x*.

30)



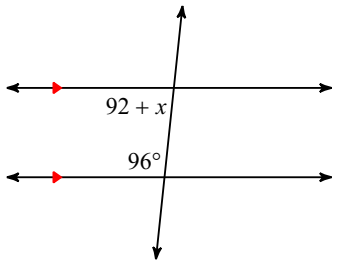
A) 7 B) 6
C) None of these D) −11

31)



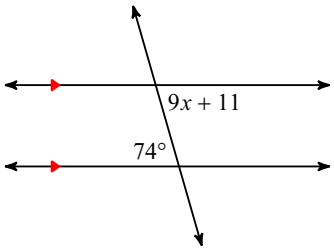
A) −3 B) −8
C) −7 D) 8

32)



A) 7 B) −8
C) 6 D) 2

33)



A) None of these B) 7
C) 3 D) −4

Find the slope of the line through each pair of points.

34) $(-5, -18), (-13, -16)$

A) −4 B) None of these
C) $\frac{1}{4}$ D) $-\frac{1}{4}$

35) $(16, -19), (-13, -7)$

A) None of these B) $\frac{29}{12}$
C) $-\frac{12}{29}$ D) $\frac{12}{29}$

Find the slope of a line parallel to each given line.

36) $6x - y = -1$

A) −6 B) $\frac{1}{6}$
C) $-\frac{1}{6}$ D) 6

37) $2x + 3y = -12$

A) $-\frac{3}{2}$ B) $-\frac{2}{3}$
C) None of these D) $\frac{2}{3}$

Find the slope of a line perpendicular to each given line.

38) $3x - 5y = -5$

A) $-\frac{5}{3}$ B) $-\frac{3}{5}$
C) $\frac{5}{3}$ D) $\frac{3}{5}$

39) $2x - y = -4$

A) 2 B) None of these
C) $\frac{1}{2}$ D) $-\frac{1}{2}$