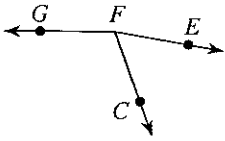
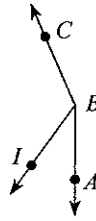


Test: Segments and Angles

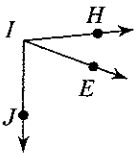
- 1) $m\angle CFG = 110^\circ$ and $m\angle EFC = 60^\circ$.
Find $m\angle EFG$.



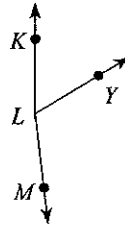
- 2) Find $m\angle IBC$ if $m\angle ABC = 156^\circ$
and $m\angle ABI = 36^\circ$.



- 3) Find x if $m\angle HIE = 3x - 4$,
 $m\angle EIJ = 8x - 10$, and $m\angle HIJ = 96^\circ$.

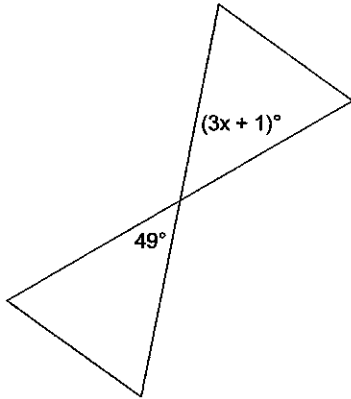


- 4) $m\angle KLM = 22x - 3$, $m\angle YLM = 114^\circ$,
and $m\angle KLY = 6x + 11$. Find $m\angle KLY$.

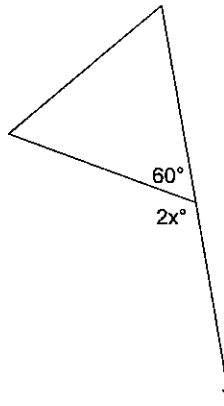


Find the value of x .

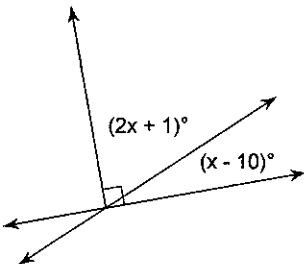
5)



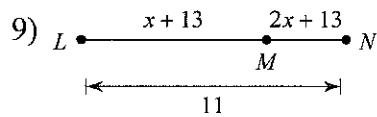
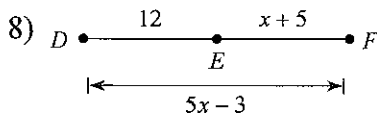
6)



7)



Solve for x .



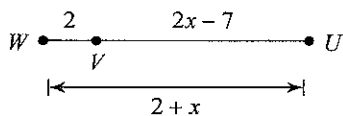
Points A, B, and C are collinear. Point B is between A and C. Find the length indicated.

10) $AB = 9$, $AC = x + 8$, and $BC = 2x - 10$.
Find BC .

11) Find AC if $AC = -1 + 2x$, $BC = 1$,
and $AB = x + 5$.

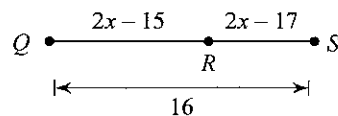
Find the length indicated.

12) Find VU



- A) 6 B) 7
C) 3 D) 5

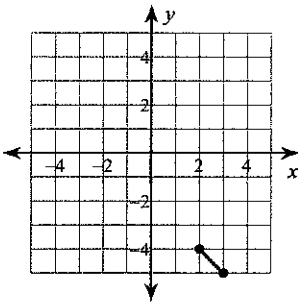
13) Find QR



- A) 12 B) 13
C) 9 D) 14

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

14)



- A) 7.5 B) 10.3
C) 3.7 D) 1.4

15) $(2, -4)$, $(-8, 6)$

- A) 5.4 B) 6.3
C) 4.5 D) 14.1

Find the midpoint of the line segment with the given endpoints.

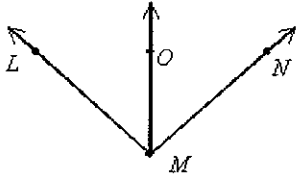
16) $(-9, 8)$, $(-7, 0)$

Find the other endpoint of the line segment with the given endpoint and midpoint.

17) Endpoint: $(-5, 5)$, midpoint: $(0, -3)$

3

- _____ 1. In the figure (not drawn to scale), \overrightarrow{MO} bisects $\angle LMN$, $m\angle LMO = (6x - 40)^\circ$, and $m\angle NMO = (x + 65)^\circ$. Solve for x and find $m\angle LMN$.



- a. 5, 10° b. 21, 251° c. 5, 61° d. 21, 172°