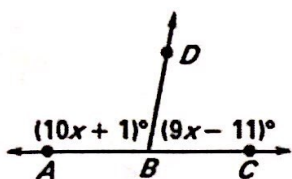


Unit 2A Test Review #1

Missing Angles: Find x

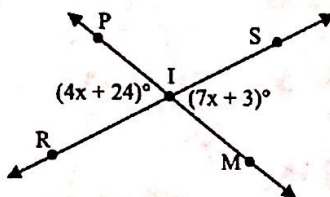
1)



LP (180°)

$$\begin{aligned} 10x + 1 + 9x - 11 &= 180 \\ 19x - 10 &= 180 \\ +10 &+10 \\ \hline 19x &= 190 \\ \frac{19x}{19} &= \frac{190}{19} \\ \hline x &= 10 \end{aligned}$$

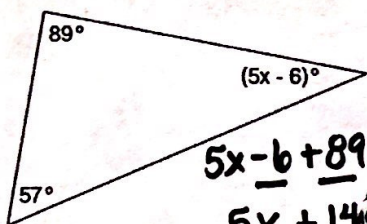
2)



Vertical (=)

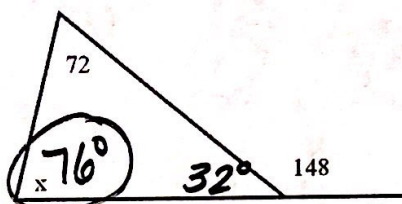
$$\begin{aligned} 4x + 24 &= 7x + 3 \\ -7x &-7x \\ \hline -3x + 24 &= 3 \\ -24 &-24 \\ \hline -3x &= -21 \\ \frac{-3x}{-3} &= \frac{-21}{-3} \\ \hline x &= 7 \end{aligned}$$

3)



$$\begin{aligned} 5x - 6 + 89 + 57 &= 180 \\ 5x + 140 &= 180 \\ -140 &-140 \\ \hline 5x &= 40 \\ \frac{5x}{5} &= \frac{40}{5} \quad x = 8 \end{aligned}$$

4)



$$\begin{aligned} 72 + 32 + x &= 180 \\ 104 + x &= 180 \\ -104 &-104 \\ \hline x &= 76 \end{aligned}$$

5) $\angle 1$ and $\angle 2$ are complementary. Solve for x and the measure of both angles.

(52) $\angle 1 = 12x + 4$
 $\angle 2 = 9x + 2$

90°

$$\begin{aligned} 12x + 4 + 9x + 2 &= 90 \\ 21x + 6 &= 90 \\ -6 &-6 \\ \hline 21x &= 84 \\ \frac{21x}{21} &= \frac{84}{21} \quad x = 4 \end{aligned}$$

(38)

Parallel Lines:

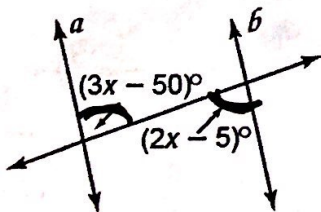
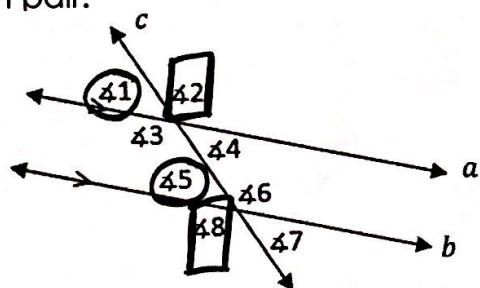
6) Name the angles listed and the special property of each pair.

a) $\angle 1$ and $\angle 5$ corresponding

b) $\angle 2$ and $\angle 8$ alt. ext.

c) $\angle 4$ and $\angle 5$ alt int.

7) Solve for x.



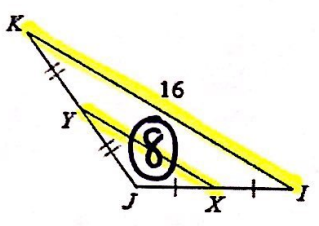
alt. int. (=)

$$\begin{aligned} 3x - 50 &= 2x - 5 \\ +50 &+50 \\ \hline 3x &= 2x + 45 \\ -2x &-2x \\ \hline x &= 45 \end{aligned}$$

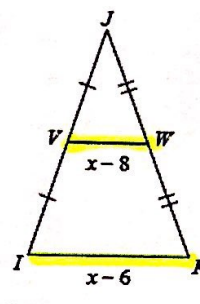
Triangle Properties:
MIDSEGMENTS:

8.)

Find XY



9.) Solve for x



Big = 2(small)
 $x - 6 = 2(x - 8)$

$x - 6 = 2x - 16$

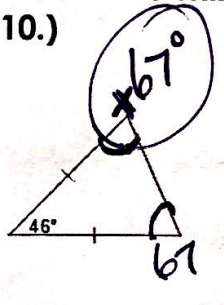
$-x - 6 = -16$

$-x = -10$

$x = 10$

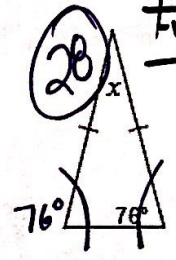
ISOSCELES TRIANGLES:

10.)



$180 - 46 = 134$
 $134 \div 2 = 67$

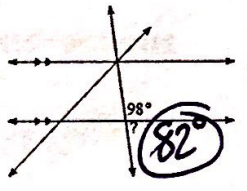
11.)



$180 - 76 - 76 = 28$

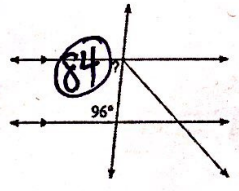
Find the measure of each angle indicated.

12)



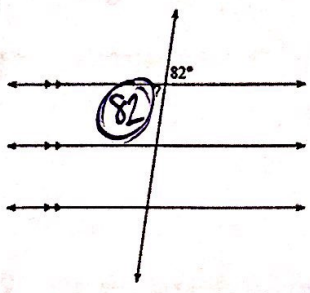
L.P.
180

13)

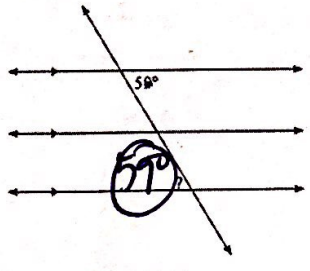


CI 180

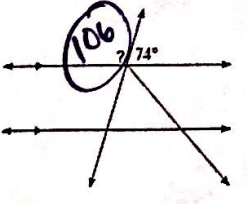
14)



15)

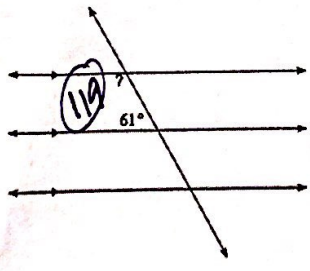


16)

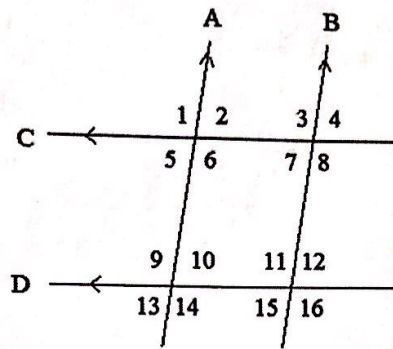


L.P.
180

17)



Use the figure below to answer questions 18-19.



18. Write Congruent or Supplementary for each pair of angles?

3 and 12 Supplementary

11 and 12 Supplementary

4 and 15 congruent

1 and 13 Supplementary

19. Write true or false for each.

$\angle 1 + \angle 6 = 180^\circ$ F

$\angle 9 - \angle 16 = 180^\circ$ F

$\angle 2 = 180^\circ - \angle 6$ T

$\angle 10 - 180^\circ = \angle 11$ F