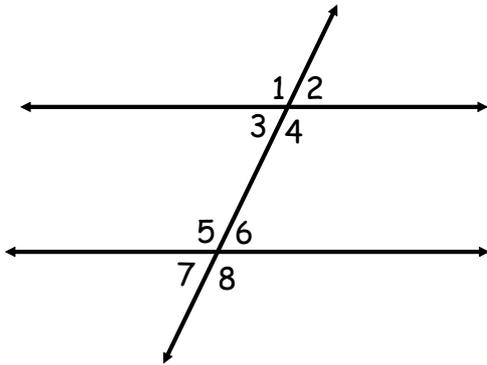


Do Now

Name the angle pairs:

A) $\angle 3$ & $\angle 6$ *Alternate Interior*B) $\angle 1$ & $\angle 4$ *Vertical*C) $\angle 1$ & $\angle 8$ *Alternate Exterior*D) $\angle 6$ & $\angle 2$ *Corresponding*

Feb 2-6:14 PM

Homework Answers

1) $\angle 2 = 112^\circ$

$\angle 3 = 112^\circ$

$\angle 4 = 68^\circ$

$\angle 5 = 68^\circ$

$\angle 6 = 112^\circ$

$\angle 7 = 112^\circ$

$\angle 8 = 68^\circ$

2) $\angle 1 = 134^\circ$

$\angle 2 = 46^\circ$

$\angle 3 = 134^\circ$

$\angle 4 = 46^\circ$

$\angle 5 = 134^\circ$

$\angle 6 = 46^\circ$

$\angle 8 = 46^\circ$

3) $\angle 1 = 83^\circ$

$\angle 2 = 97^\circ$

$\angle 3 = 83^\circ$

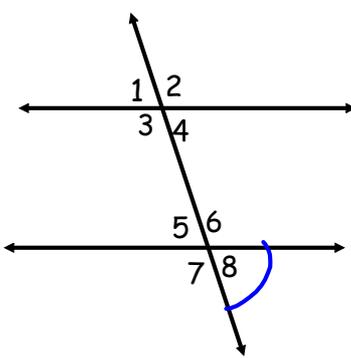
$\angle 4 = 97^\circ$

$\angle 5 = 83^\circ$

$\angle 6 = 97^\circ$

$\angle 8 = 83^\circ$

Jan 22-7:26 AM



1) If the $m\angle 4 = 6x$ and $m\angle 5 = 4x + 14$

a) Name the angle pair
Alternate Interior

b) What is the value of x ?

$$\begin{array}{r} 6x = 4x + 14 \\ -4x \quad -4x \\ \hline 2x = 14 \\ \hline x = 7 \end{array}$$

c) What is the degree measure of $\angle 8$?
 $m\angle 4 = 6(7)$
 $\angle 4 = 42^\circ$
 $\angle 4$ corresponds to $\angle 8$
 $m\angle 8 = 42^\circ$
 $x = 7$

Feb 3-6:08 PM

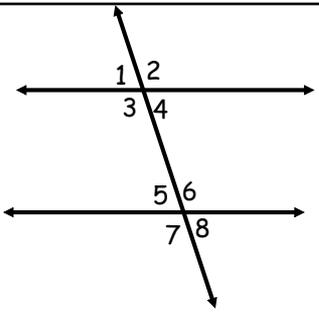
2) If $m\angle 1 = 3x$ and $m\angle 8 = 4x - 9$

A) Name the angle pair
Alternate Exterior

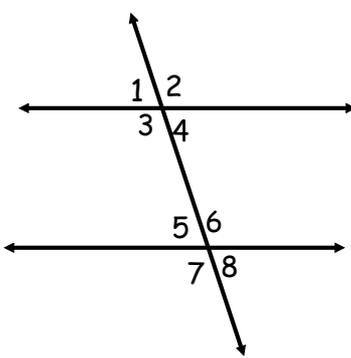
B) Find x

$$\begin{array}{r} 3x = 4x - 9 \\ -4x \quad -4x \\ \hline -x = -9 \\ \hline x = 9 \end{array}$$

C) Find the $m\angle 6$
 $m\angle 1 = 3x$
 $= 3(9)$
 $= 27^\circ$
 $180 - 27$
 $m\angle 6 = 153^\circ$



Feb 3-6:25 PM



If the $m\angle 2 = 9x - 20$ and $m\angle 6 = 7x + 18$

a) Name the angle pair **Corresponding**

b) What is the value of x ?

$$\begin{array}{r} 9x - 20 = 7x + 18 \\ -7x \quad -7x \\ \hline 2x - 20 = 18 \\ 2x = 38 \\ x = 19 \end{array}$$

c) What is the degree measure of $\angle 3$?

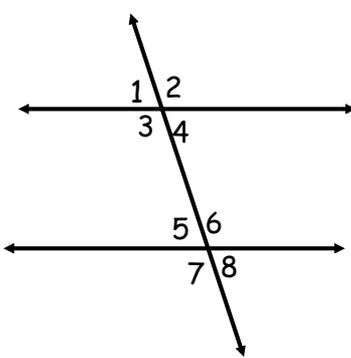
$$m\angle 2 = 9x - 20$$

$$= 9(19) - 20$$

$$m\angle 2 = 151^\circ$$

$m\angle 3 = 151^\circ$

Feb 3-6:08 PM



4) If the $m\angle 5 = 17x - 11$ and $m\angle 8 = 10x + 17$

a) Name the angle pair **Vertical**

b) What is the value of x ?

$$\begin{array}{r} 17x - 11 = 10x + 17 \\ +11 \quad +11 \\ \hline 17x = 10x + 28 \\ -10x \quad -10x \\ \hline 7x = 28 \\ x = 4 \end{array}$$

c) What is the degree measure of $\angle 2$?

$$m\angle 5 = 17x - 11$$

$$= 17(4) - 11$$

$$m\angle 5 = 57^\circ$$

$$180 - 57$$

$$m\angle 2 = 123^\circ$$

$x = 4$

Feb 3-6:08 PM