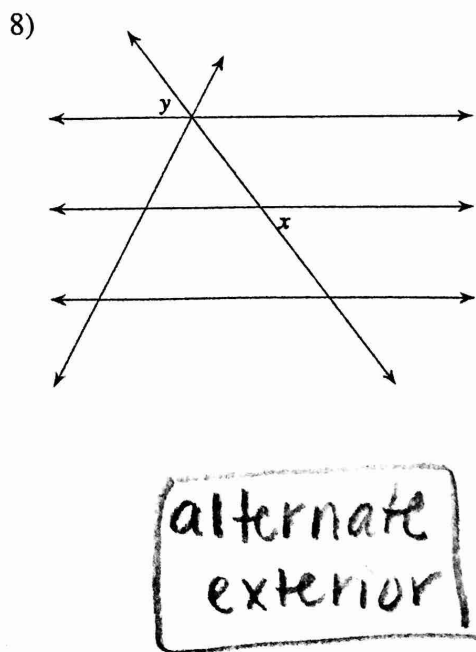
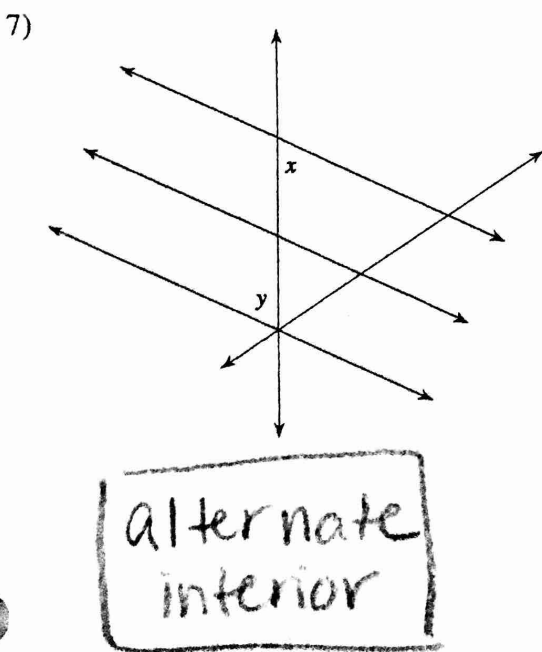
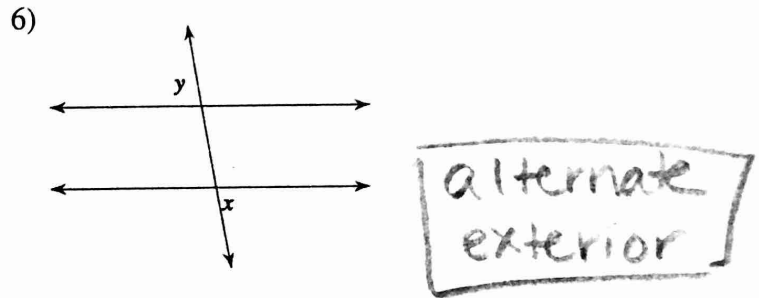
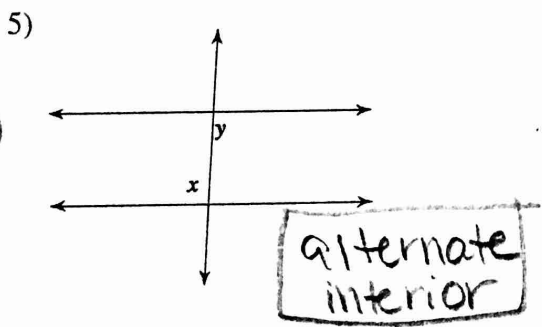
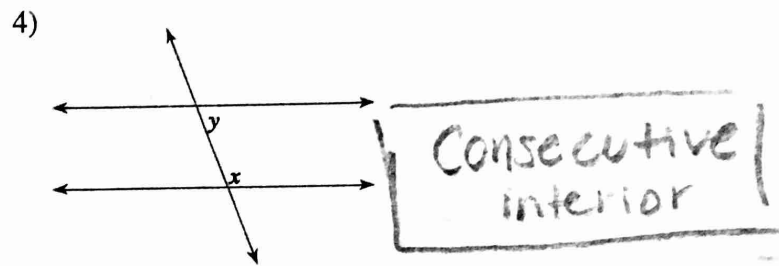
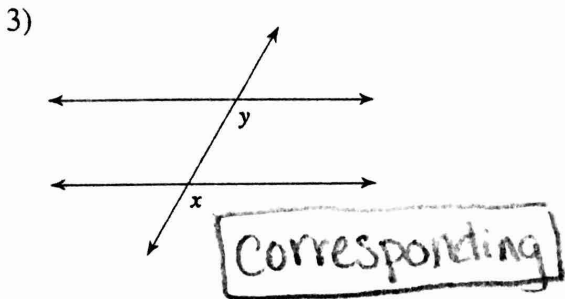
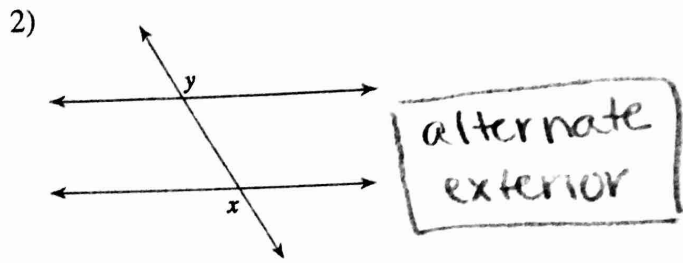
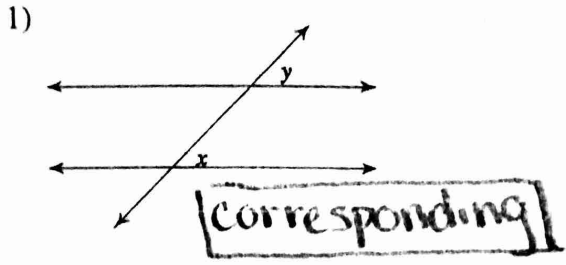


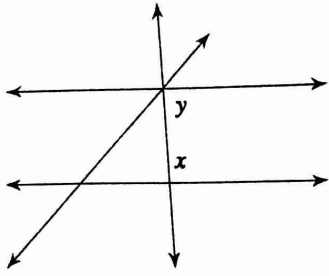
Parallel Lines and Transversals

Name _____

Identify each pair of angles as corresponding, alternate interior, alternate exterior, or consecutive interior.

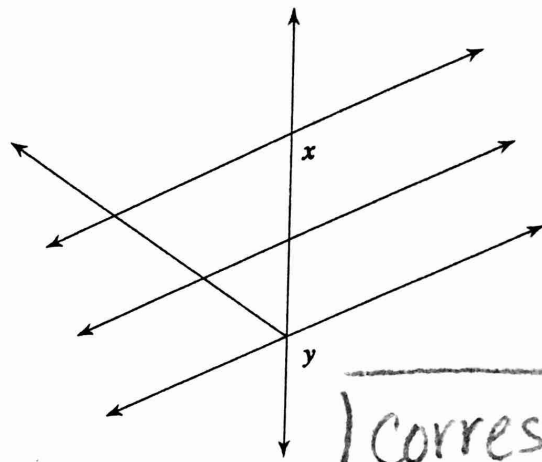


9)



consecutive interior

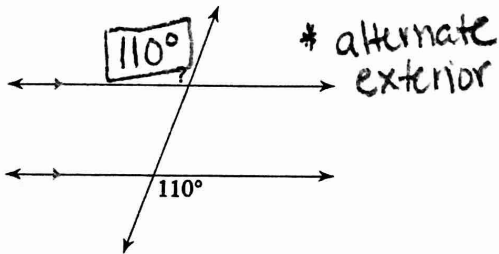
10)



Corresponding

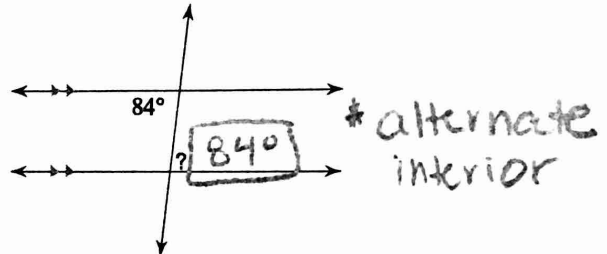
Find the measure of each angle indicated.

11)



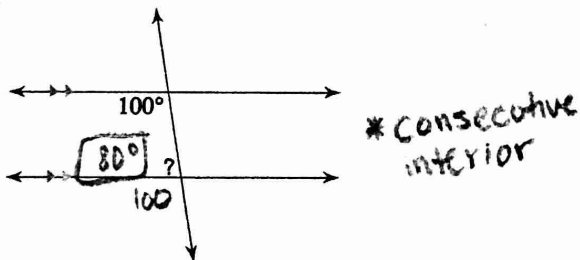
* alternate exterior

12)



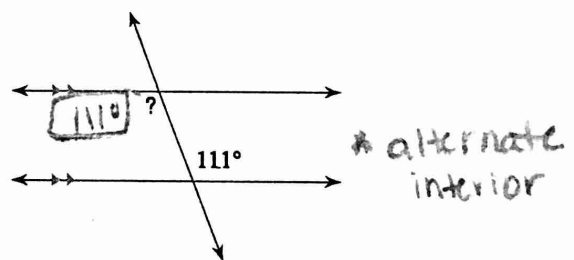
* alternate interior

13)



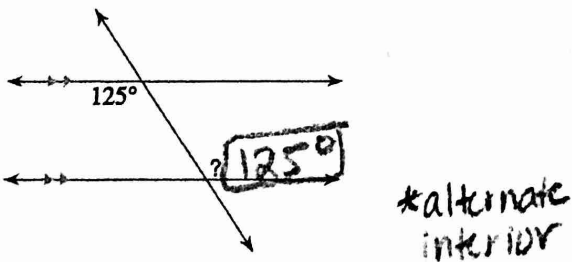
* consecutive interior

14)



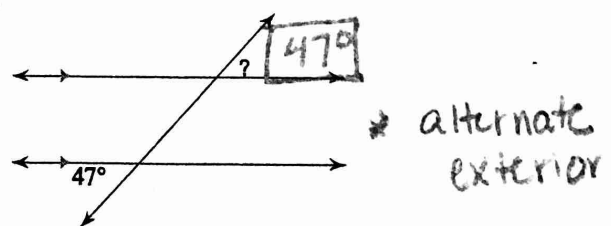
* alternate interior

15)



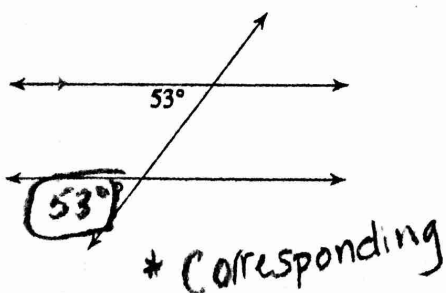
* alternate interior

16)



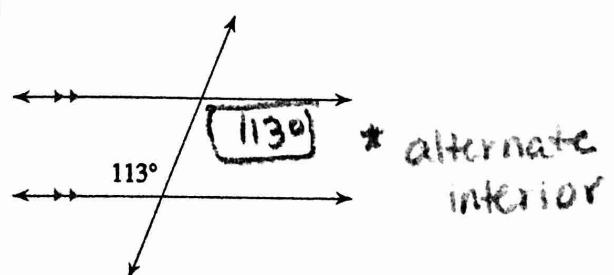
* alternate exterior

17)



* Corresponding

18)



* alternate interior

Solve for x.

19)

alt ext

$$21x + 6 = 90$$

$$\begin{array}{r} -6 \quad -6 \\ \hline 21x = 84 \\ \hline 21 \quad 21 \\ \hline x = 4 \end{array}$$

20)

* Corresp.

$$75 = 11x - 2$$

$$\begin{array}{r} +2 \quad +2 \\ \hline 77 = 11x \\ \hline 11 \quad 11 \\ \hline 7 = x \end{array}$$

21)

* alt int

$$8x - 4 = 60$$

$$\begin{array}{r} +4 \quad +4 \\ \hline 8x = 64 \\ \hline 8 \quad 8 \\ \hline x = 8 \end{array}$$

22)

* alt int

$$x + 139 = 132$$

$$\begin{array}{r} -139 \quad -139 \\ \hline x = -7 \end{array}$$

23)

* alt ext

$$-1 + 14x = 12x + 17$$

$$\begin{array}{r} -12x \quad -12x \\ \hline -1 + 2x = 17 \\ +1 \quad -1 \\ \hline 2x = 18 \\ \hline x = 9 \end{array}$$

24)

* Corresp

$$23x - 5 = 21x + 5$$

$$\begin{array}{r} -21x \quad -21x \\ \hline 2x - 5 = 5 \\ +5 \quad +5 \\ \hline 2x = 10 \\ \hline x = 5 \end{array}$$

Find the measure of the angle indicated in bold.

25)

$$x + 96 + x + 96 = 180$$

$$2x + 192 = 180$$

$$\begin{array}{r} -192 \quad -192 \\ \hline 2x = -12 \\ \hline x = -6 \end{array}$$

$$-6 + 96 = \mathbf{90^\circ}$$

26)

$$20x + 5 + 24x - 1 = 180$$

$$44x + 4 = 180$$

$$\begin{array}{r} -4 \quad -4 \\ \hline 44x = 176 \\ \hline x = 4 \end{array}$$

$$20(4) + 5 = \mathbf{85^\circ}$$

27)

$$6x = 5x + 10$$

$$\begin{array}{r} -5x \quad -5x \\ \hline x = 10 \end{array}$$

$$6(10) = \mathbf{60^\circ}$$

28)

$$x + 109 + x + 89 = 180$$

$$2x + 198 = 180$$

$$\begin{array}{r} -198 \quad -198 \\ \hline 2x = -18 \\ \hline x = -9 \end{array}$$

$$-9 + 89 = \mathbf{80^\circ}$$