

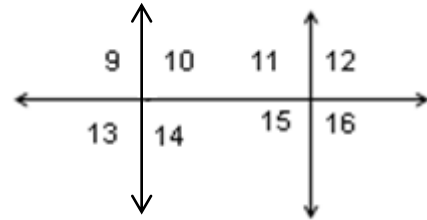
Worksheet #3 (Parallel Lines Cut by a Transversal)

Name: _____ Date: _____ Period: _____

Use the figure at the right to answer problems 1- 8.

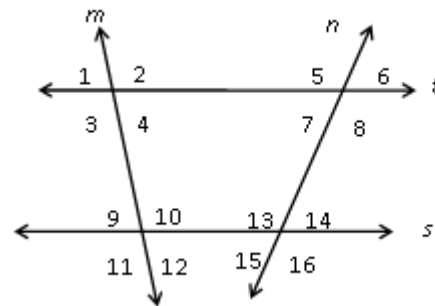
Classify each pair of angles as one of the following:

- (a) alternate interior angles (b) corresponding angles
 (c) alternate exterior angles (d) vertical angles
 (e) supplementary angles (f) none



1. _____ $\angle 9$ & $\angle 16$ 5. _____ $\angle 9$ & $\angle 11$
 2. _____ $\angle 15$ & $\angle 11$ 6. _____ $\angle 9$ & $\angle 15$
 3. _____ $\angle 10$ & $\angle 15$ 7. _____ $\angle 13$ & $\angle 14$
 4. _____ $\angle 12$ & $\angle 15$ 8. _____ $\angle 14$ & $\angle 11$

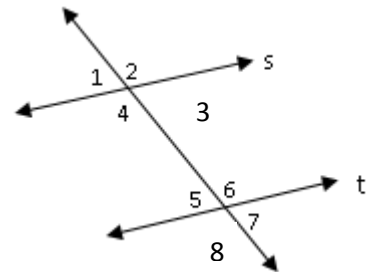
9. $m\angle 2 = 97^\circ$ $m\angle 6 = 83^\circ$
 $m\angle 3 =$ _____ $m\angle 5 =$ _____
 $m\angle 10 =$ _____ $m\angle 7 =$ _____
 $m\angle 9 =$ _____ $m\angle 16 =$ _____



Find the value of x given that $s \parallel t$

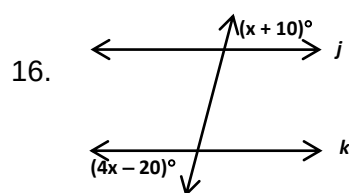
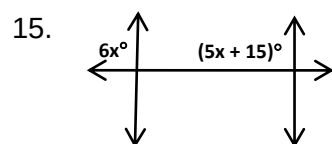
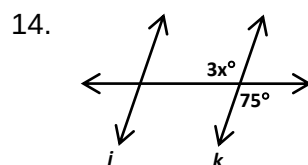
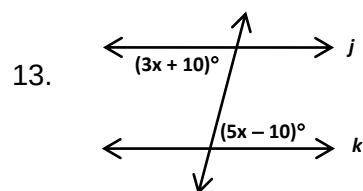
10. $m\angle 4 = 77^\circ$, $m\angle 8 = 4x + 57$

11. $m\angle 3 = 5x + 13$, $m\angle 5 = 53^\circ$



12. $m\angle 1 = 6x - 5$, $m\angle 7 = 115^\circ$

Find the value of x that makes $j \parallel k$.



Determine the missing angles.

