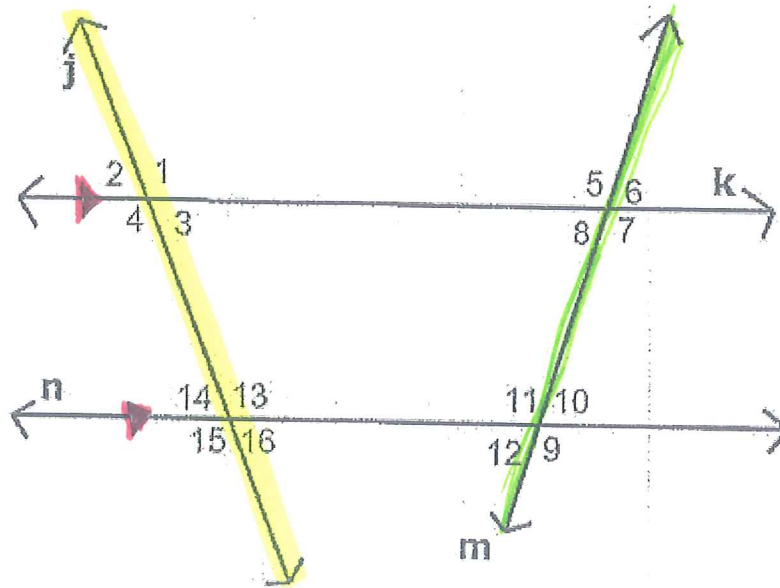


Warm-Up: Parallels cut by a transversal

Name: _____



True or false, if the statement is false correct the statement to make it true.

1. In the figure above, $j \parallel m$
2. Corresponding angles are supplementary.
3. Linear pairs are always congruent.
4. Consecutive interior angles are supplementary.
5. Alternate exterior angles are congruent.
6. Alternate exterior angles are supplementary.

Name the relationship for each pair of angles below. If none apply, write none. Write the relationship that you know correlates to the angle. For example, don't just put vertical angles, write: *vertical angles* \cong .

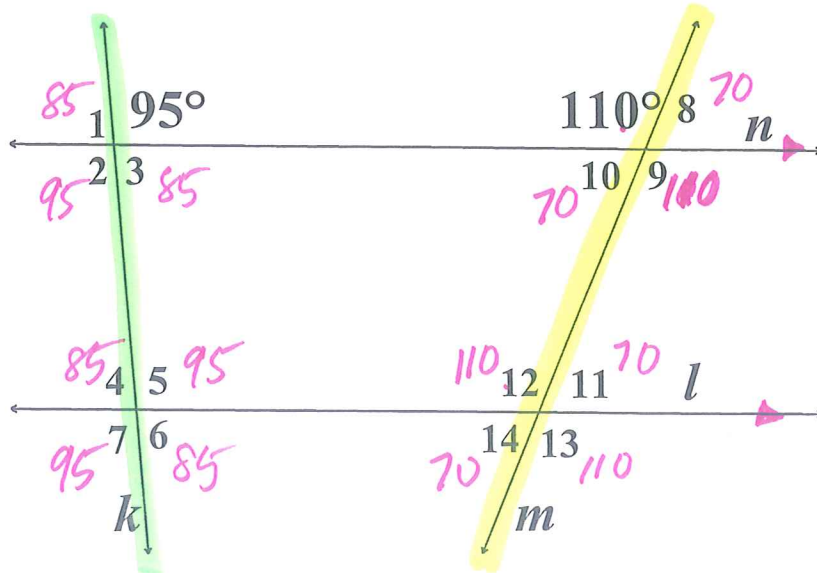
7. $\angle 10$ and $\angle 11$ *L.P. supp.* \cong 8. $\angle 3$ and $\angle 14$ *alt. int.* \cong 9. $\angle 11$ and $\angle 8$ *consec. int. supp.*
10. $\angle 13$ and $\angle 10$ *none* 11. $\angle 12$ and $\angle 6$ *alt. ext.* \cong 12. $\angle 5$ and $\angle 7$ *vert. A.* \cong
13. $\angle 15$ and $\angle 4$ *corresp.* \cong 14. $\angle 13$ and $\angle 11$ *none* 15. $\angle 11$ and $\angle 9$ *V.A.* \cong

Special Angles and Parallel Lines Practice

Day #3

Find the missing angle measures if $n \parallel l$.

← parallel ← perpend.
 $a \perp b$



$\angle 1 = \underline{85}$

$\angle 8 = \underline{70}$

$\angle 2 = \underline{95}$

$\angle 9 = \underline{110}$

$\angle 3 = \underline{85}$

$\angle 10 = \underline{70}$

$\angle 4 = \underline{85}$

$\angle 11 = \underline{70}$

$\angle 5 = \underline{95}$

$\angle 12 = \underline{110}$

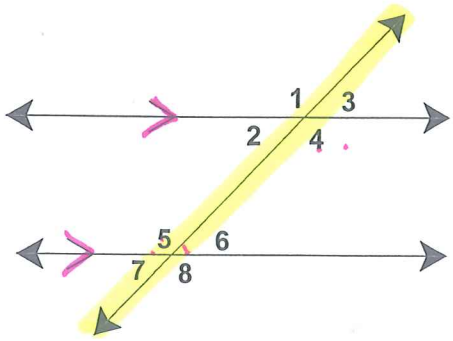
$\angle 6 = \underline{85}$

$\angle 13 = \underline{110}$

$\angle 7 = \underline{95}$

$\angle 14 = \underline{70}$

For exercises 1-6, tell whether each statement is true or false using the figure below, then explain the relationship between the two given angles.



1. $\angle 1 \cong \angle 3$ False
L.P. Supp.
 $\angle 1 + \angle 3 = 180$

2. $\angle 8 \cong \angle 3$ False
no relationship!
(1 is acute +
1 is obtuse so
they can't be \cong)

3. $\angle 2$ and $\angle 6$ are supplementary.
False
Alt. Int. \cong

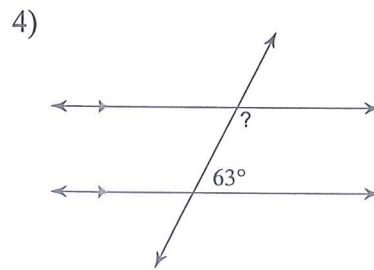
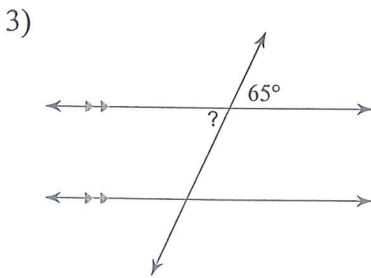
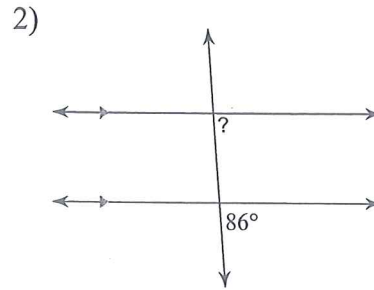
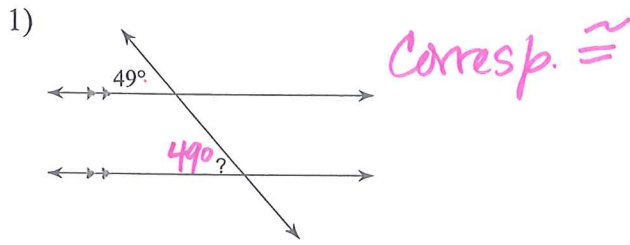
4. $\angle 7$ and $\angle 8$ are supplementary.
True. L.P. Supp.

5. $m\angle 1 \neq m\angle 6$ True
 $\angle 1$ is obtuse
 $\angle 2$ is acute

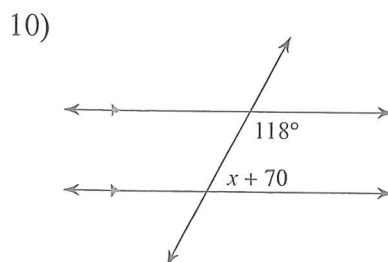
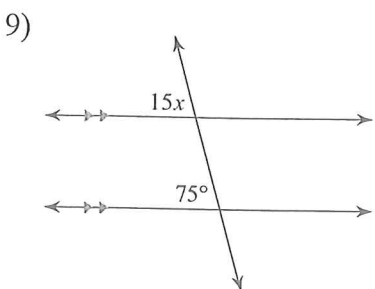
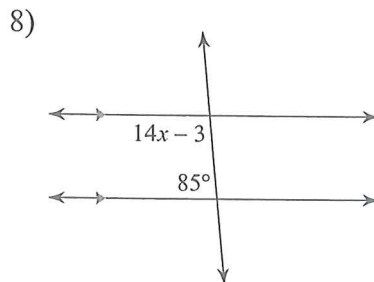
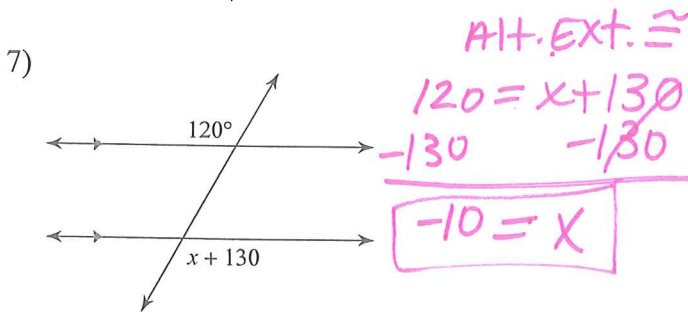
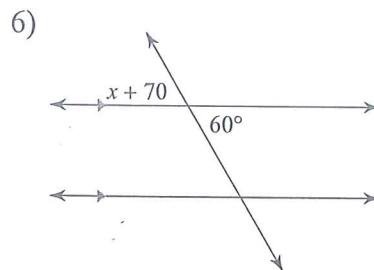
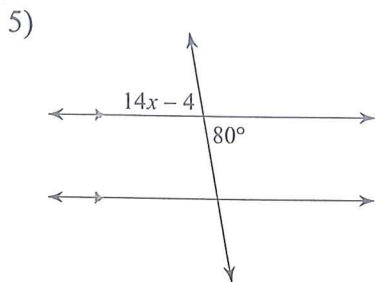
6. $m\angle 5 = m\angle 4$ True
Alt. Int. \cong

Parallels Cut by a Transversal (Algebra Style)

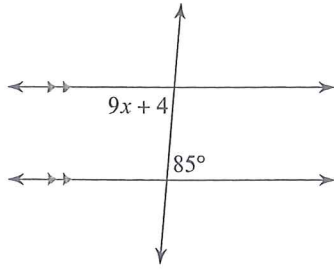
Find the measure of each angle indicated. State the justification for how you found the angle. (i.e. alt. ext. angles are congruent)



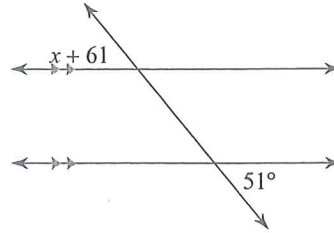
Solve for x . Justify the set up.



11)

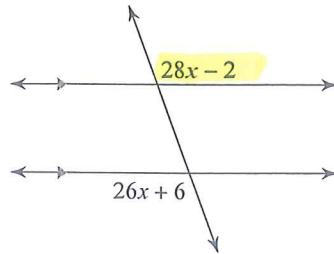


12)

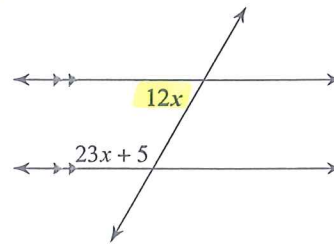


Find the measure of the angle indicated in bold. Justify the set up.

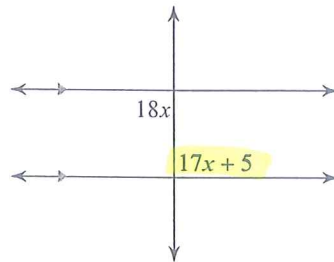
13)



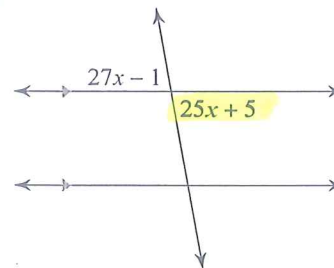
14)



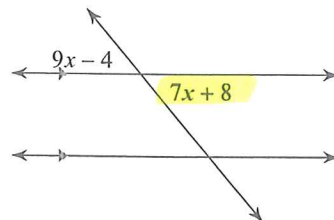
15)



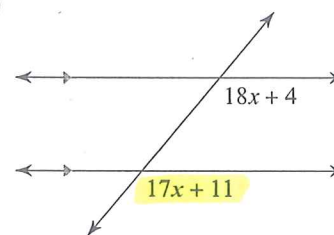
16)



17)

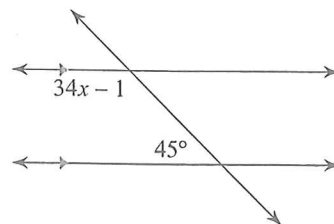


18)



Solve for x . Justify the set up.

19)



20)

