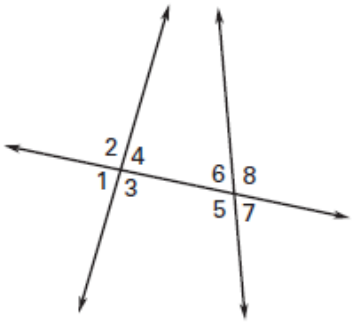
GROUP MEMBERS NAMES_____ PERIOD_____

GEOMETRY - LINES & ANGLES REVIEW

Name_____ **Part A**

Identify the pairs of angles as *corresponding, alternate interior, alternate exterior, consecutive interior,* or *vertical* angles.

1. $\angle 1$ and $\angle 8$
2. $\angle 4$ and $\angle 5$
3. $\angle 4$ and $\angle 6$
4. $\angle 2$ and $\angle 3$
5. $\angle 3$ and $\angle 7$
6. $\angle 2$ and $\angle 7$



1._____

2._____

3._____

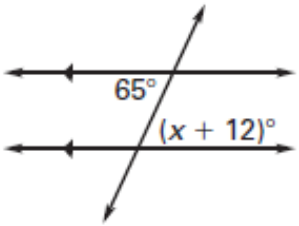
4._____

5._____

6._____

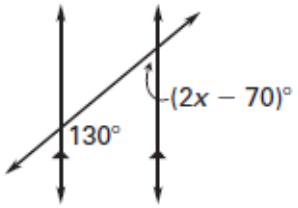
Name_____ **Part B**

Name the relationship between the angles and solve for x.



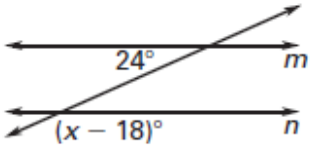
Name_____ **Part C**

Name the relationship and solve for x.



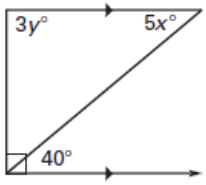
Name_____ **Part D**

Name the relationship and solve for x. Line *m* is parallel to line *n*.



Name_____ **Part E**

Solve for x and y.



Name_____ **Part F**

Tell whether the lines through the given points are *parallel, perpendicular,* or *neither*.

13. Line 1: (1, 2), (2, 0)
Line 2: (0, −1), (−2, −2)

14. Line 1: (−2, 1), (1, −1)
Line 2: (1, 3), (4, 1)

15. Line 1: (0, 1), (1, 4)
Line 2: (3, 2), (6, 3)

16. Line 1: (−1, 1), (1, 3)
Line 2: (2, −1), (4, 1)

Write an equation of the line that passes through point *P* and is parallel to the line with the given equation.

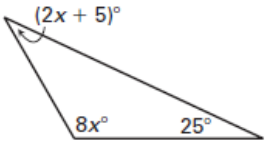
19. $P(-1, 3), y = 4x - 2$

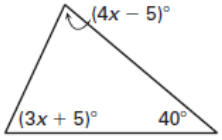
Write an equation of the line that passes through point *P* and is perpendicular to the line with the given equation.

21. $P(0, 2), y = \frac{1}{2}x + 1$

Name_____ **Part H**

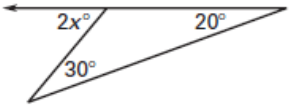
Solve for x and then classify the type of triangle.

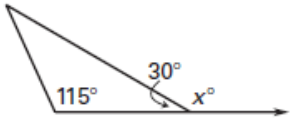




Name_____ **Part J**

Solve for x and then find the exterior angle.





Name_____ **Part K**

Construct the following using only a straight-edge and a compass:

a. Parallel line to line *l* through the point *N*.

b. Perpendicular line through point *R*.