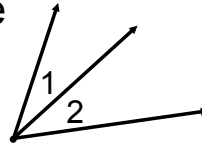


HW: Worksheet/5-9, 18-26, 28-35, 40

Adjacent angles-

common vertex, common side



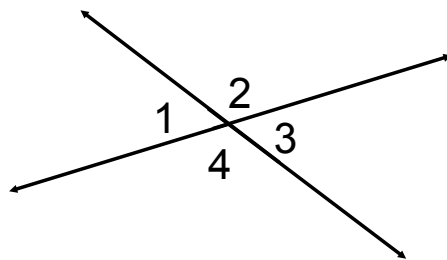
Vertical angles-

angles formed by two intersecting lines that are opposite one another

-vertical angles are congruent

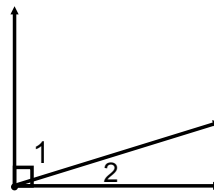
- angles 1 and 3 are vertical angles

-angles 2 and 4 are vertical angles



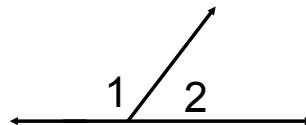
Complementary angles-

sum is 90 degrees



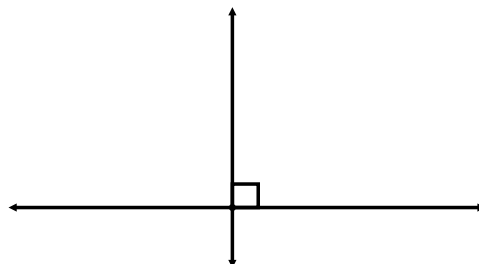
Supplementary angles-

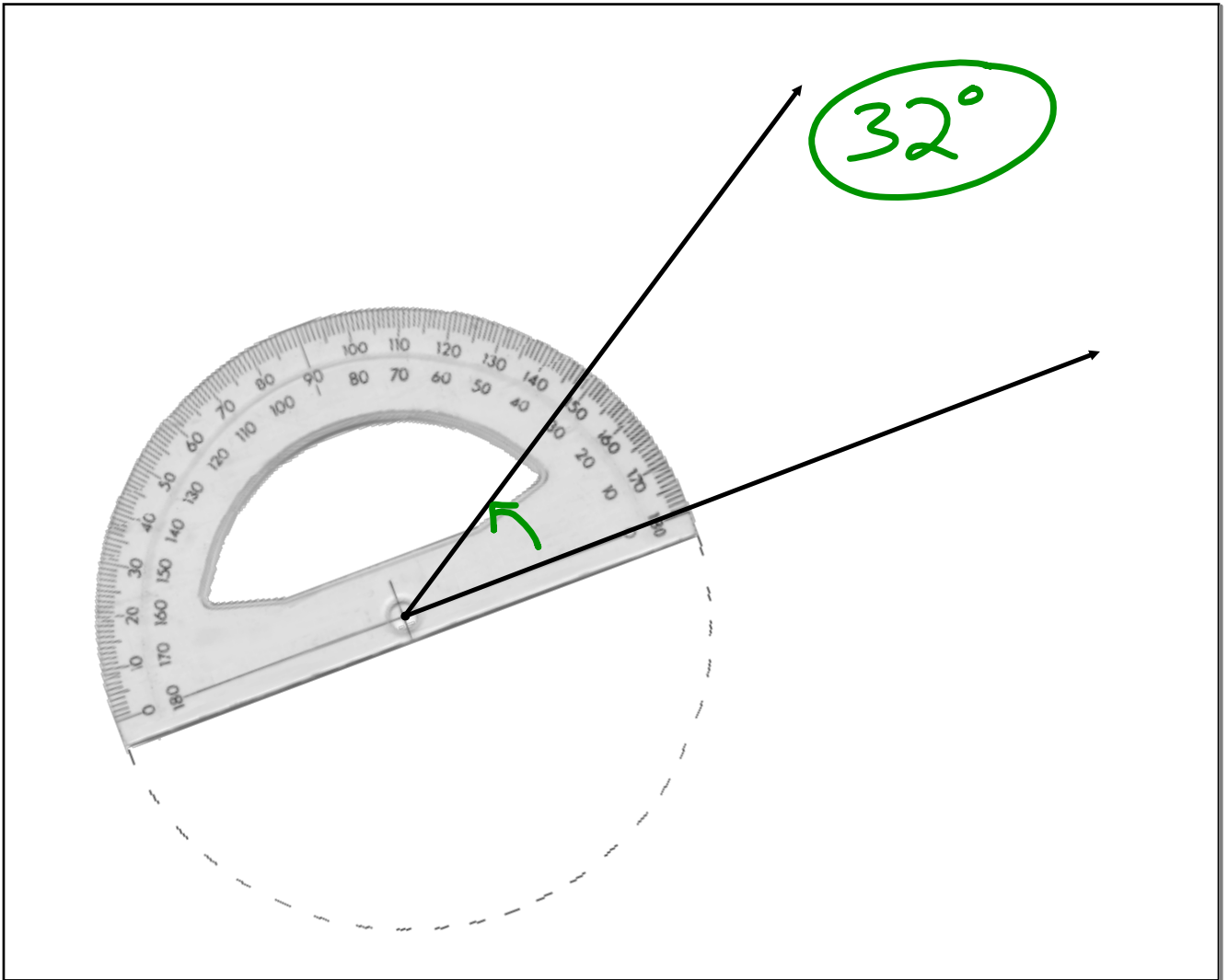
sum is 180 degrees



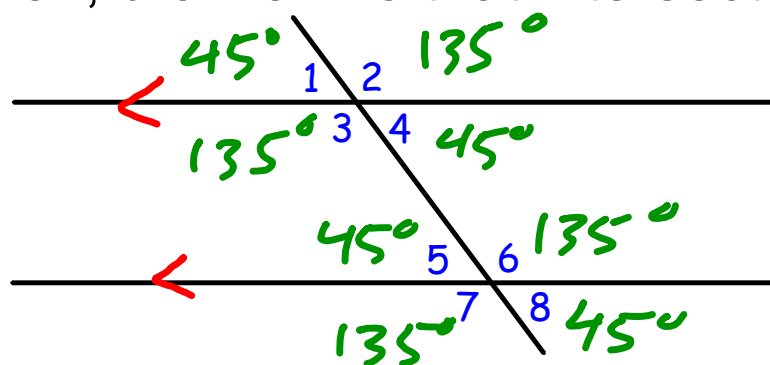
Perpendicular lines-

two lines that intersect to form a right angle





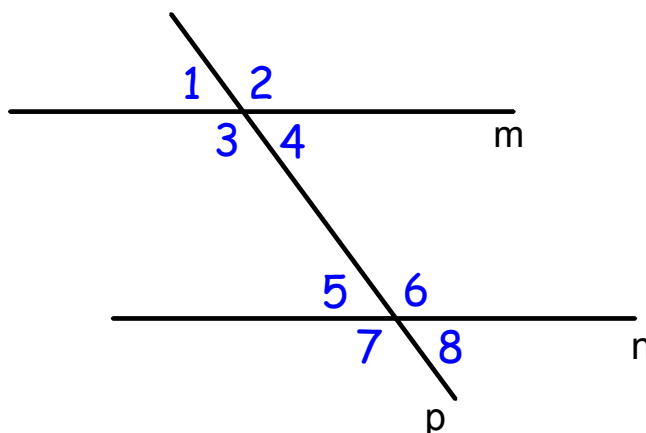
Use the lines on your paper to draw two parallel lines. Then, draw a line that intersects them.



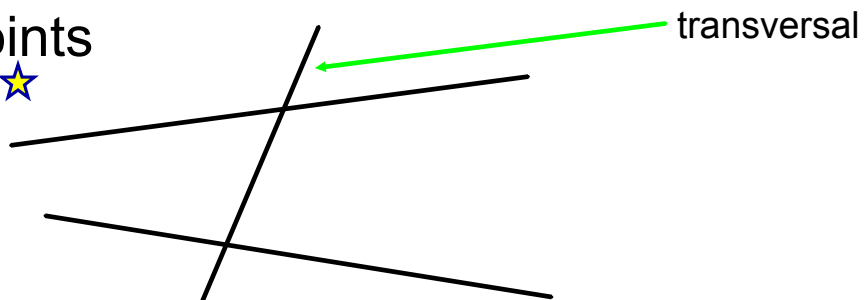
Find the measures of the numbered angles and record them.

What do you notice about the angles?

$\angle 1, \angle 4, \angle 5, \angle 8$ are \cong
 $\angle 2, \angle 3, \angle 6, \angle 7$ are \cong



transversal - a line that intersects two other lines at different points



corresponding angles - angles that lie on the same side of the transversal and in corresponding positions

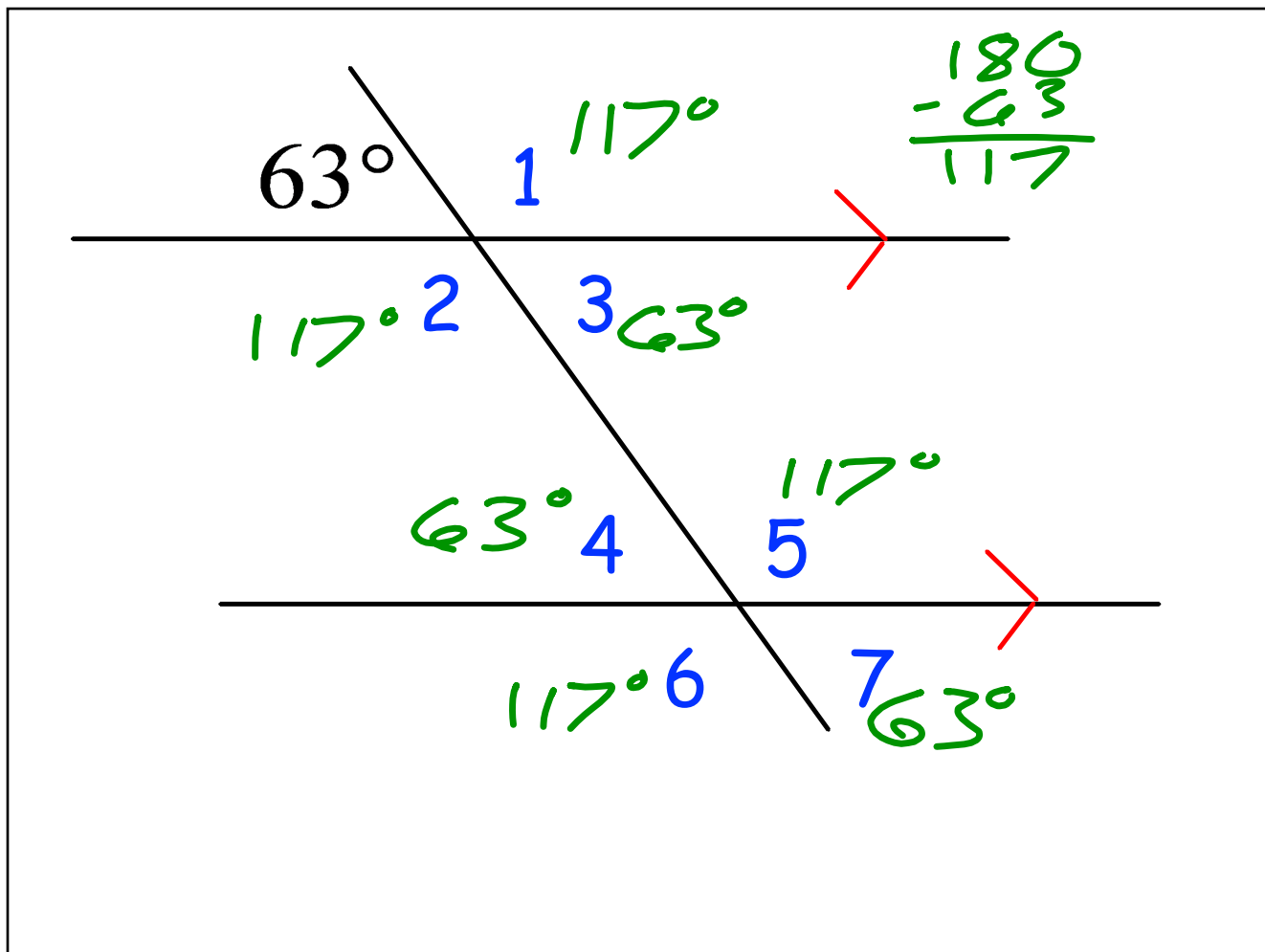
ex: 1 and 5, 3 and 7, 2 and 6, 4 and 8

alternate interior angles - angles that lie within a pair of lines and on opposite sides of the transversal

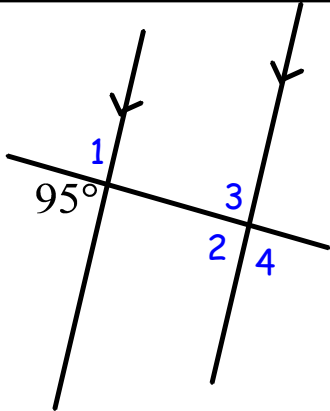
ex: 3 and 6, 4 and 5

alternate exterior angles - angles that lie outside a pair of lines and on opposite sides of the transversal

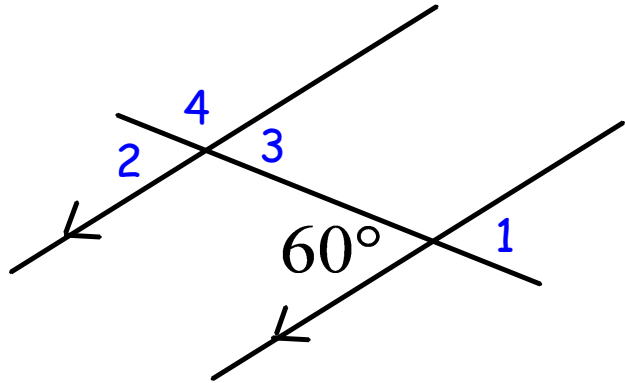
ex: 1 and 8, 2 and 7



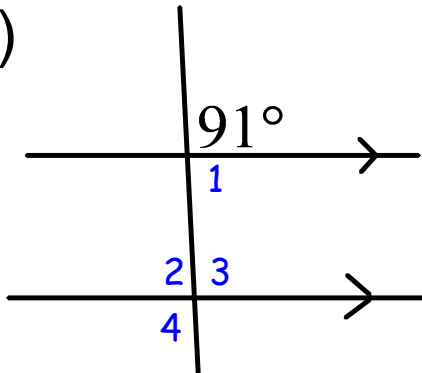
1)



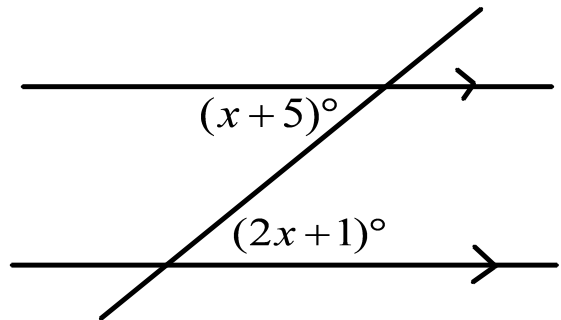
2)



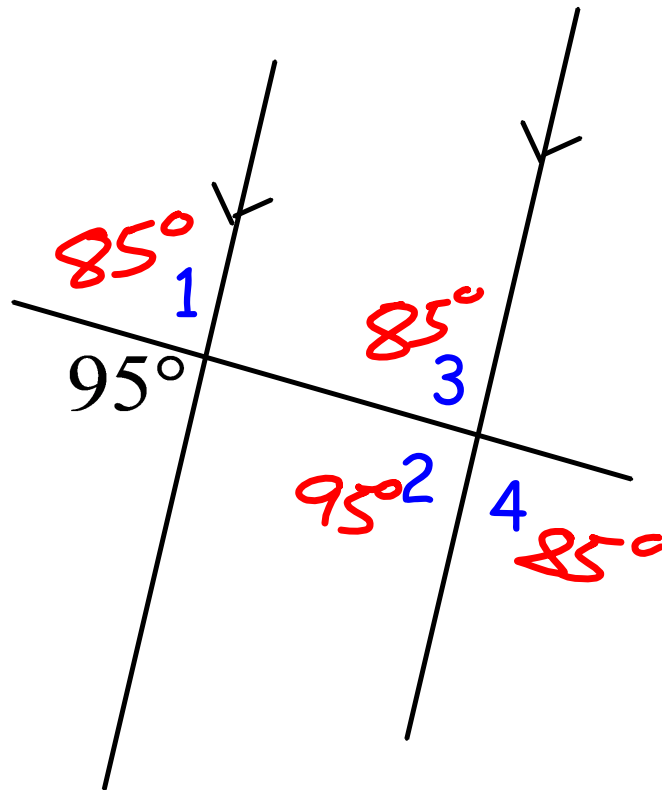
3)



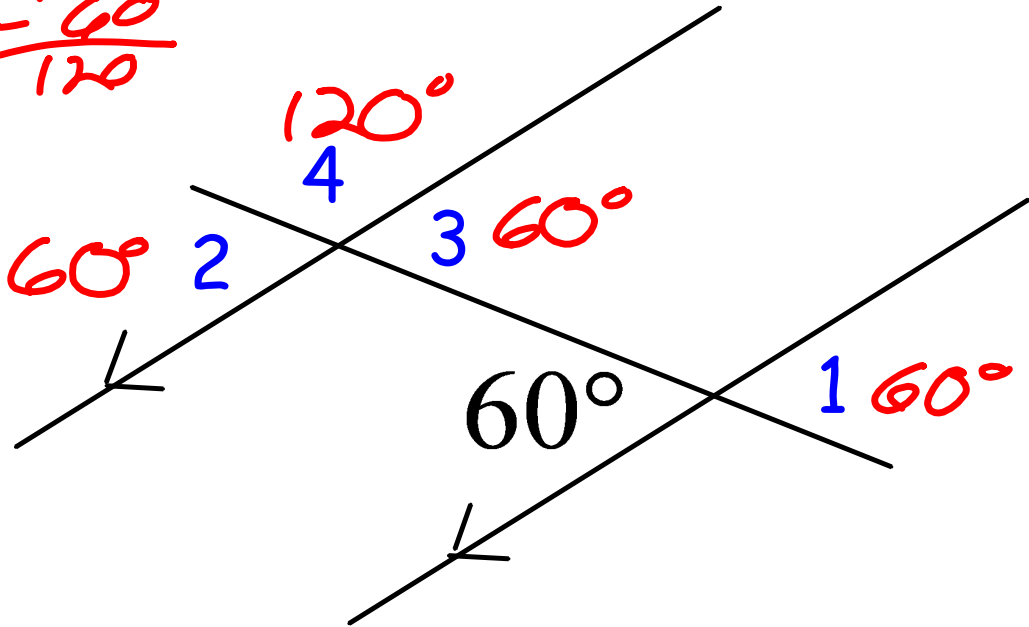
4) Solve for x.



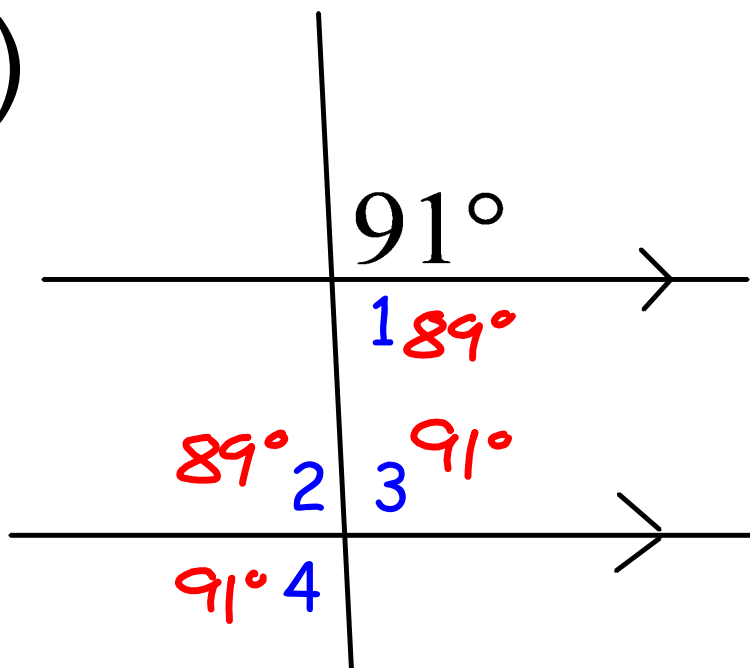
1)



2)
$$\begin{array}{r} 180 \\ - 60 \\ \hline 120 \end{array}$$



3)



4) Solve for x.

$$\begin{array}{r} x + 5 = 2x + 1 \\ -x \quad -x \\ \hline 5 = x + 1 \\ -1 \quad -1 \\ \hline 4 = x \end{array}$$

$(x + 5)^\circ$

$(2x + 1)^\circ$

