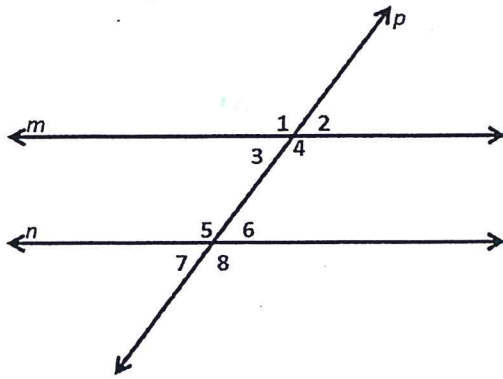


Parallel Lines Cut By A Transversal Notes

Reminder: Supplementary angles are two angles that add up to 180° . They make a straight line.



1. Name the parallel lines.

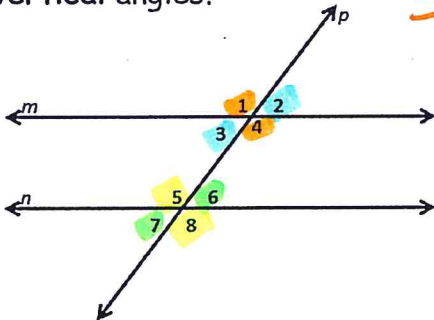
$\overleftrightarrow{m} + \overleftrightarrow{n}$

2. Name the transversal.

\overleftrightarrow{p}

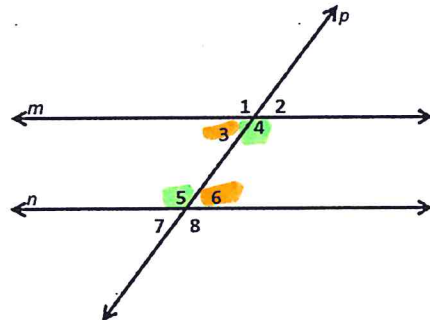
3. Name and highlight the vertical angles.

Congruent



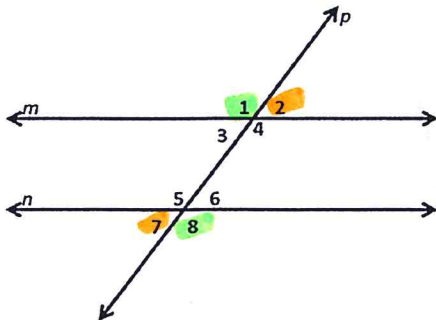
4. Name and highlight the alternate interior angles.

Congruent



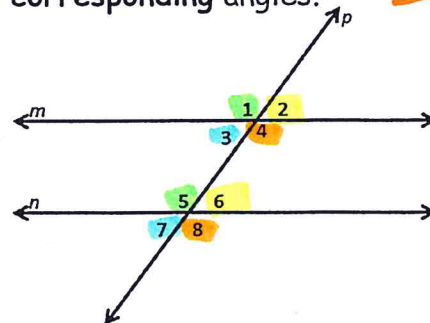
5. Name and highlight the alternate exterior angles.

Congruent

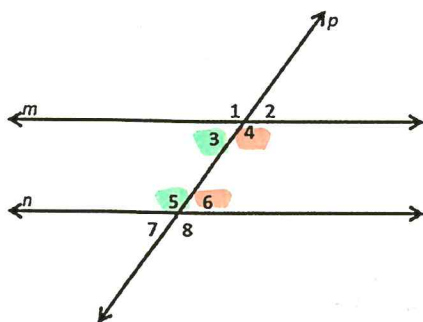


6. Name and highlight the corresponding angles.

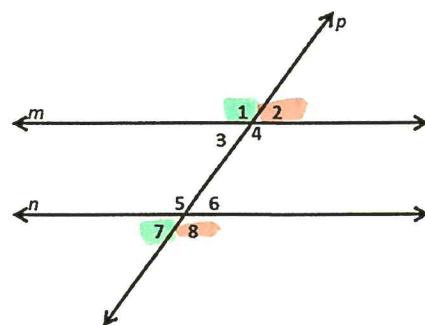
Congruent



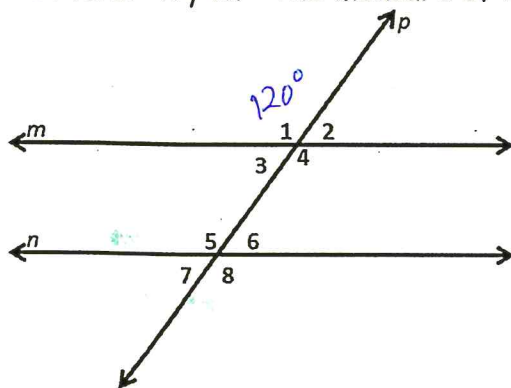
7. Name and highlight the Supplementary same side interior angles.



8. Name and highlight the Supplementary same side exterior angles.

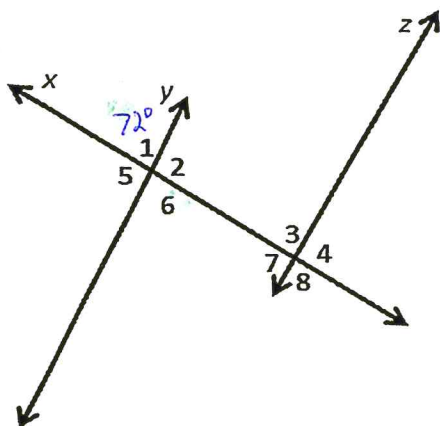


If you know the measure of one of the 8 angles, you can find the measure of all of the others. Try it. The measure of $\angle 1 = 120^\circ$.



$$\begin{aligned}\angle 2 &= 60^\circ \\ \angle 3 &= 60^\circ \\ \angle 4 &= 120^\circ \\ \angle 5 &= 120^\circ \\ \angle 6 &= 60^\circ \\ \angle 7 &= 60^\circ \\ \angle 8 &= 120^\circ\end{aligned}$$

Try it again. The measure of $\angle 1 = 72^\circ$.



$$\begin{aligned}\angle 2 &= 108^\circ \\ \angle 3 &= 72^\circ \\ \angle 4 &= 108^\circ \\ \angle 5 &= 108^\circ \\ \angle 6 &= 72^\circ \\ \angle 7 &= 108^\circ \\ \angle 8 &= 72^\circ\end{aligned}$$