

Geometry BELL WORK

Find each angle measure.

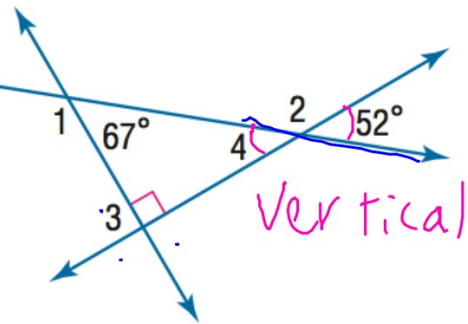
(Lesson 1-5)

5. $\angle 1$ $180 - 67 = 113^\circ$

6. $\angle 2$ $180 - 52 = 128^\circ$

7. $\angle 3 = 90^\circ$

8. $\angle 4 = 52^\circ$



CHAPTER

3

Parallel and Perpendicular Lines

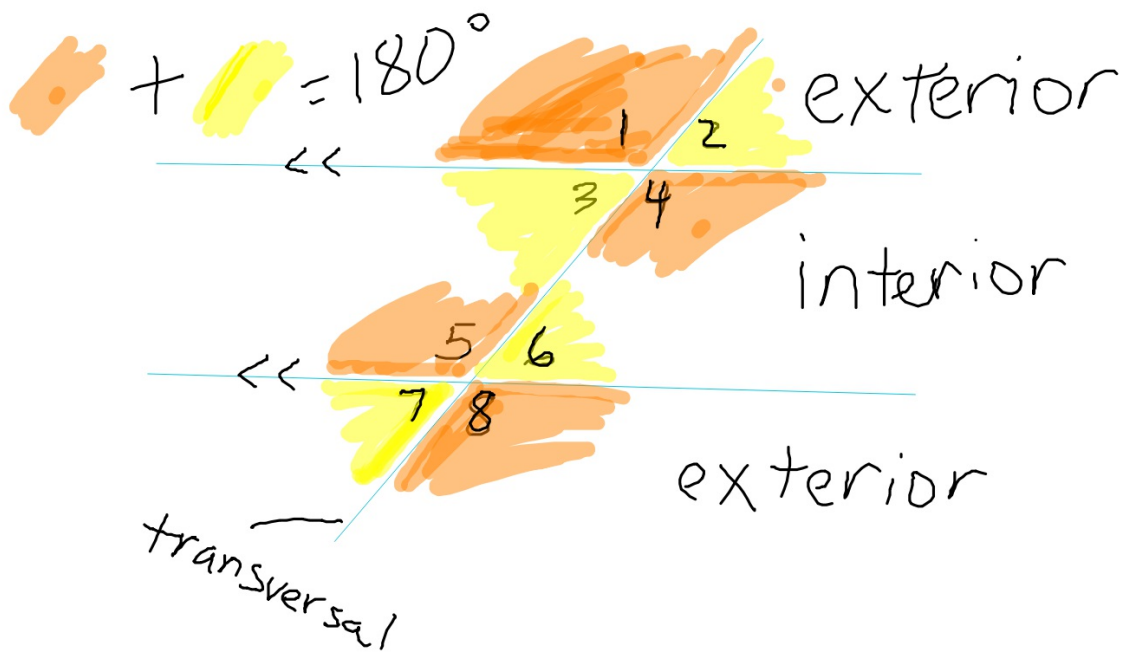
3-1 Parallel Lines and Transversals

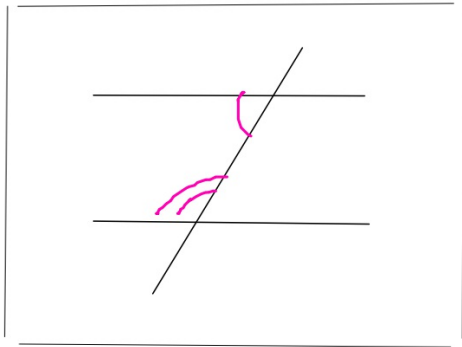
Today we will:

- * Identify the relationships between two lines or two planes
- * Name angle pairs formed by parallel lines and transversals

(G.CO.C.9 Congruence: Prove theorems about lines and angles

Parallel Lines and Transversals

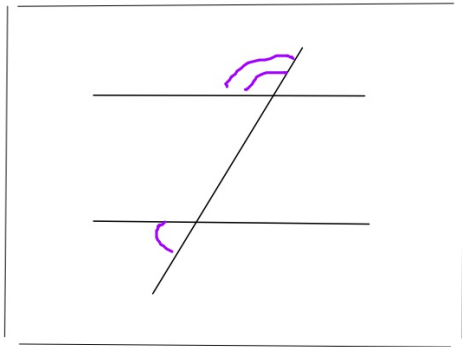




$$\angle 3 + \angle 5 = 180^\circ$$

$$\angle 4 + \angle 6 = 180^\circ$$

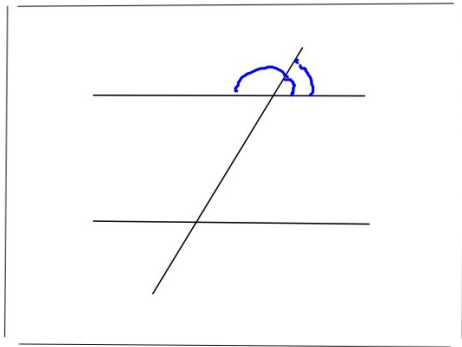
consecutive
interior
angles
(supplementary)



$$\angle 1 + \angle 7 = 180^\circ$$

$$\angle 2 + \angle 8 = 180^\circ$$

consecutive
exterior
angles
(supplementary)



1 + 2

3 + 4

5 + 6

7 + 8

1 + 3

2 + 4

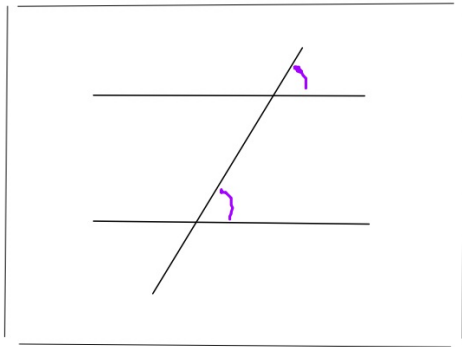
5 + 7

6 + 8

Linear

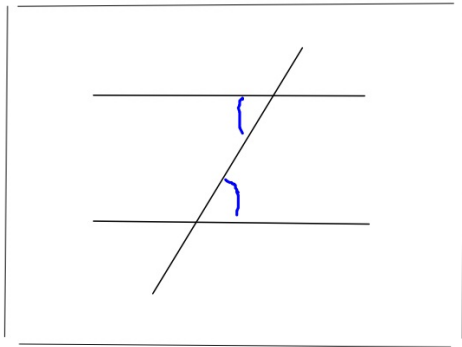
Pair

(supplementary)



Corresponding
angles
(congruent)

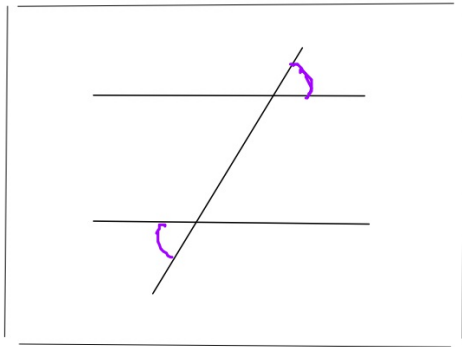
$$\begin{aligned}\angle 2 &\cong \angle 6 \\ \angle 1 &\cong \angle 5 \\ \angle 3 &\cong \angle 7 \\ \angle 4 &\cong \angle 8\end{aligned}$$



alternate
interior
angles
(congruent)

$$\angle 3 \cong \angle 6$$

$$\angle 4 \cong \angle 5$$



alternate
exterior
angles
(congruent)

$$\angle 2 \cong \angle 7$$

$$\angle 1 \cong \angle 8$$