

9-4 Transversals

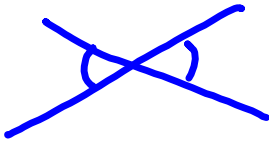
Objectives:

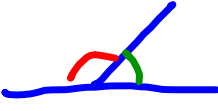
- I can identify types of angles on two parallel lines cut by a transversal.
- I can find missing angles of two parallel lines cut by a transversal.

Review Vocab

Supplementary: two \angle 's that add to 180°

Complementary: two \angle 's that add to 90°

Vertical:  \angle 's that are opposite each other

Adjacent:  Share a side + a vertex

New Vocab

Vertical Angle:

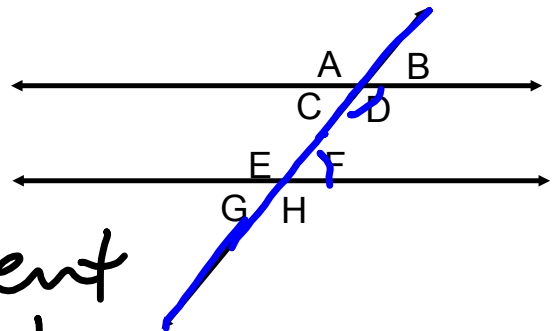
Adjacent Angle:

Alternate Interior:

Are congruent
or equal

Alternate Exterior:

Corresponding:

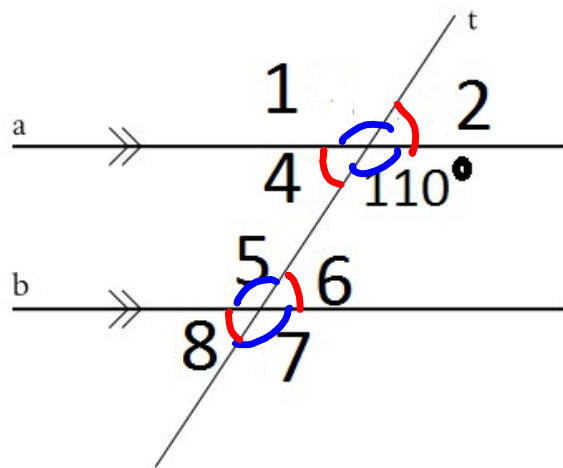


Same side
int

Supp. or
the add to
180

Given the measurement of one angle, find the measure of ALL other angles.

$$\begin{array}{l} \angle 1 \quad \underline{110^\circ} \\ \angle 2 \quad \underline{70^\circ} \\ \angle 3 \quad \underline{\quad\quad} \\ \angle 4 \quad \underline{70^\circ} \\ \angle 5 \quad \underline{110^\circ} \\ \angle 6 \quad \underline{70^\circ} \\ \angle 7 \quad \underline{110^\circ} \\ \angle 8 \quad \underline{70^\circ} \end{array}$$



Given the measurement of one angle, find the measure of ALL other angles.

$\angle 1$ _____

$\angle 2$ _____

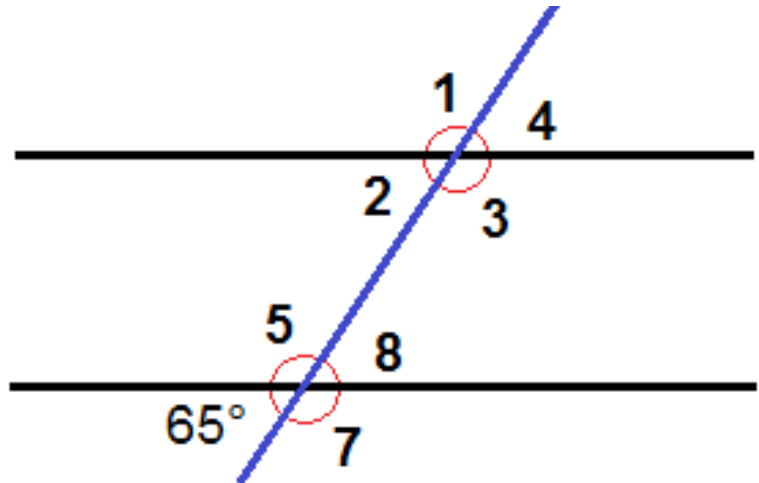
$\angle 3$ _____

$\angle 4$ _____

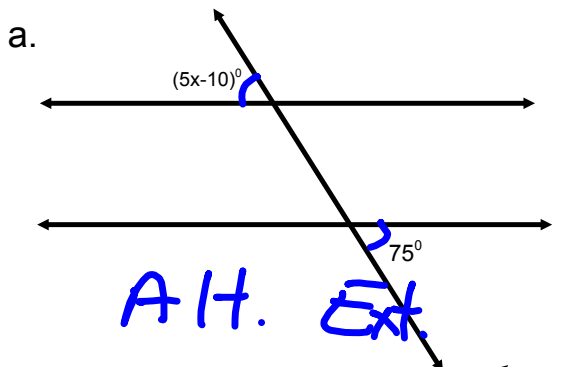
$\angle 5$ _____

$\angle 6$ _____

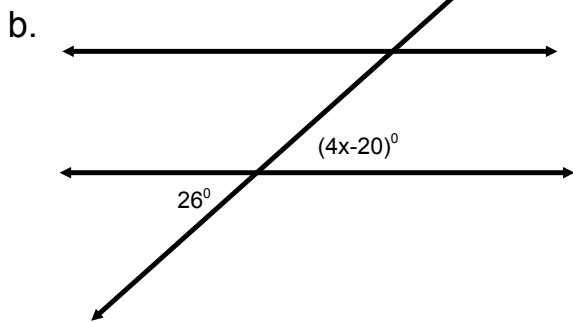
$\angle 7$ _____



State the angle relationship and solve for x. Then find all other angle measures



$$\begin{array}{r}
 5x - 10 = 75 \\
 +10 \quad +10 \\
 \hline
 5x = 85 \\
 \div 5 \quad \div 5 \\
 \hline
 x = 17
 \end{array}$$



State the angle relationship and solve for x . Then find all other angle measures

a.

