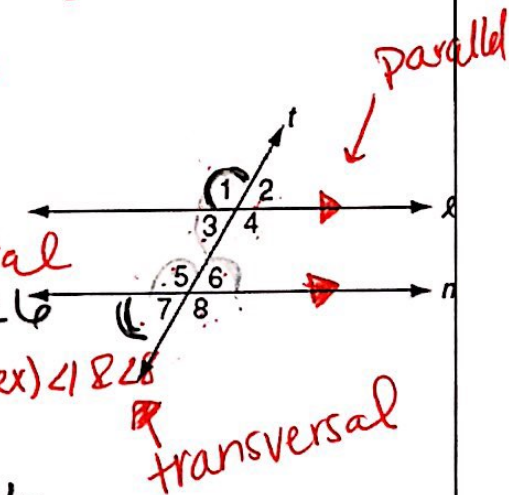


Ms. Maher

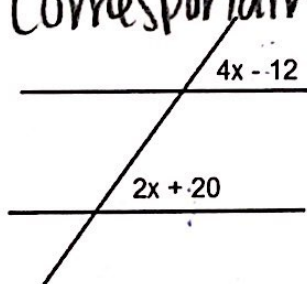
GUIDED NOTES: Geometric Properties

adjacent \rightarrow right next to each other touching

Important Vocabulary	Picture
Vertical Angles: \cong	pair of opposite angles formed by intersecting lines ex) $\angle 1 \cong \angle 4$
Linear Pair: $= 180$	adjacent angles, form a line Add up to 180 ex) $\angle 1 \& \angle 2$
Corresponding Angles: \cong	same side, same position ex) $\angle 1, \angle 5$
Alternate Interior Angles: \cong	opposite side of transversal inside // lines ex) $\angle 3 \& \angle 6$
* Alternate Exterior Angles: \cong	opposite side of transversal outside // lines ex) $\angle 2 \& \angle 8$
Same-side Consecutive Interior Angles: $= 180$	Same side of transversal inside // lines ex) $\angle 4 \& \angle 6$
Same-side Consecutive Exterior Angles: $= 180$	Same side of transversal outside // lines ex) $\angle 1 \& \angle 7$



EX1. Corresponding \cong



$$4x - 12 = 2x + 20$$

$$+12 \quad +12$$

$$4x = 2x + 32$$

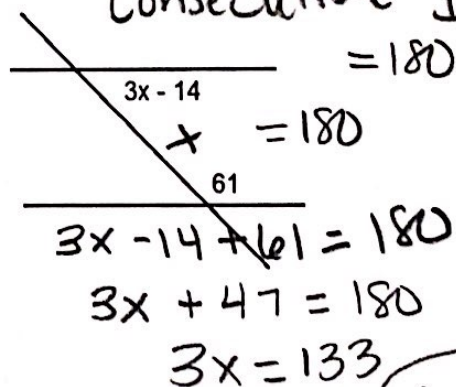
$$-2x \quad -2x$$

$$2x = 32$$

$$x = 16$$

EX2.

consecutive Int. $= 180$



$$3x - 14 + 61 = 180$$

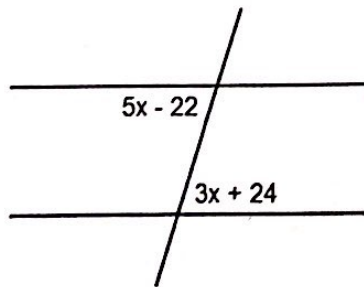
$$3x + 47 = 180$$

$$3x = 133$$

$x = 44.33$

Alt Int. \cong

EX3.



$$5x - 22 = 3x + 24$$

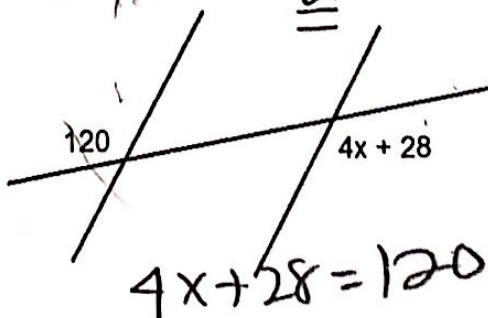
$$5x = 3x + 46$$

$$2x = 46$$

$$x = 23$$

EX4.

Alt Ext. \cong



$$4x + 28 = 120$$

$x = 23$