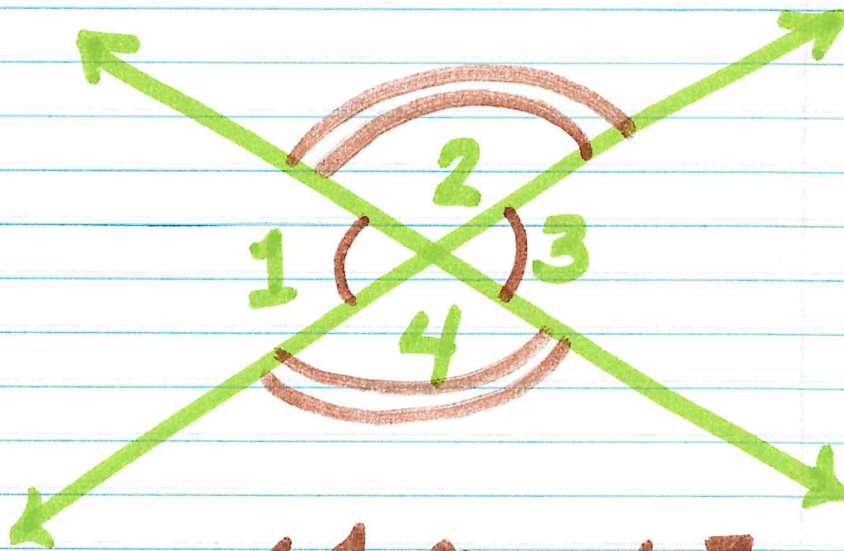


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Lesson 6 - Unknown \angle 's

Vertical \angle 's : (\cong) \angle 's

(ex)

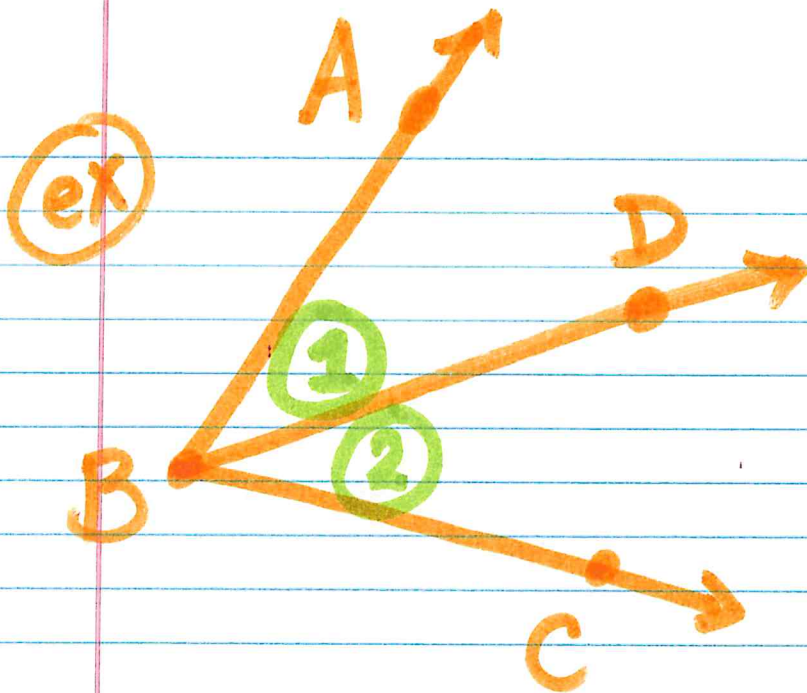


$$m\angle 1 \cong m\angle 3$$

$$m\angle 2 \cong m\angle 4$$

Angle Addition:

add \angle 's total degrees

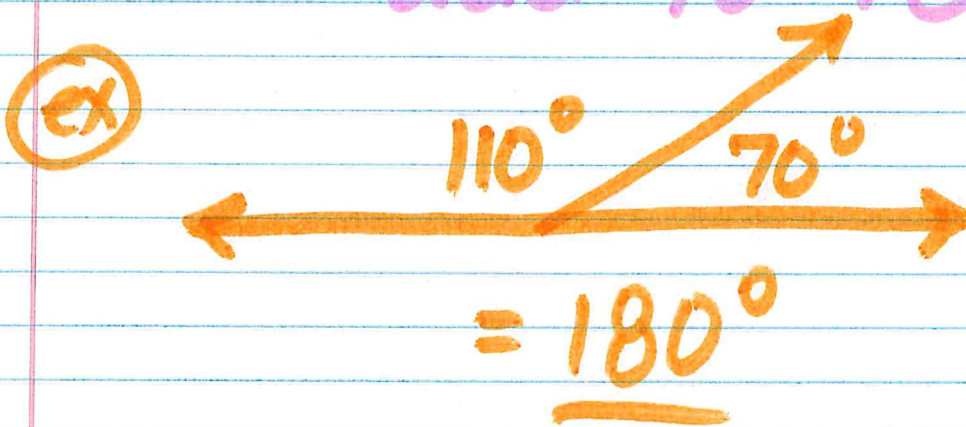


$$m\angle 1 + m\angle 2 = m\angle ABC$$

$$\angle ABD + \angle DBC = \angle ABC$$

Supplementary \angle 's

\rightarrow add to 180°



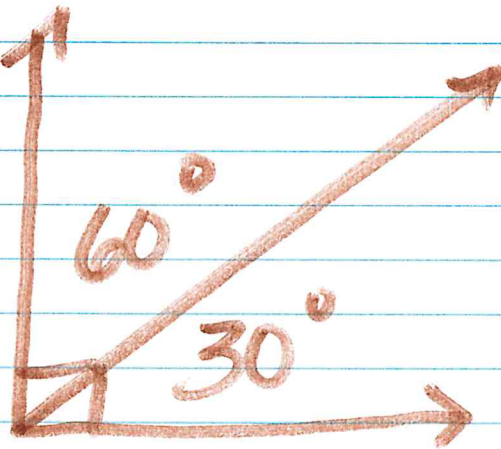
(ex)



$$\begin{array}{r} 180 \\ - 120 \\ \hline 60^\circ \end{array}$$

Complementary \angle 's
sum is 90°

(ex)



(3)

Acute Δ

- all \angle 's less than 90°

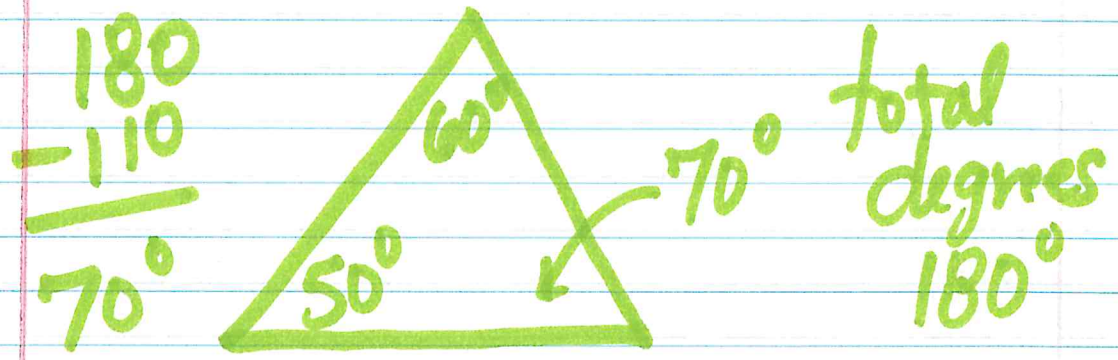
Right Δ :

→ 1 $90^\circ \angle$

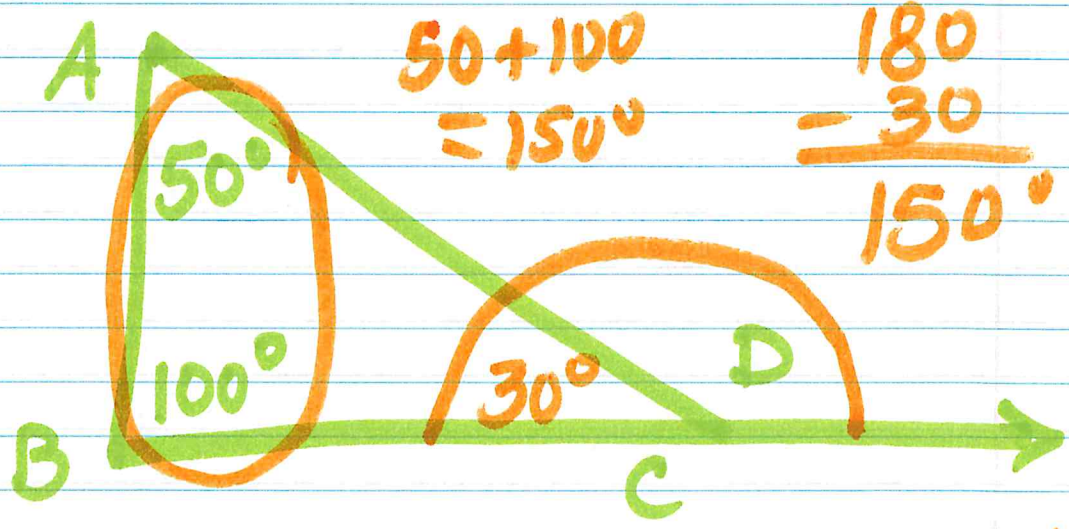
Obtuse Δ :

→ 1 angle greater than 90°

Interior \angle 's remainder theorem (rule)



Exterior \angle 's



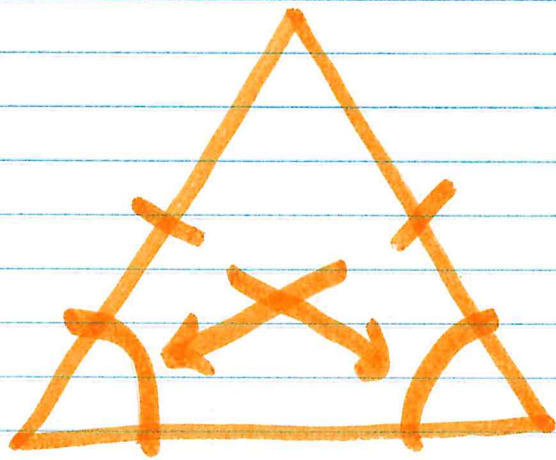
$$50 + 100 = 150^\circ$$

$$m\angle D = 150^\circ$$

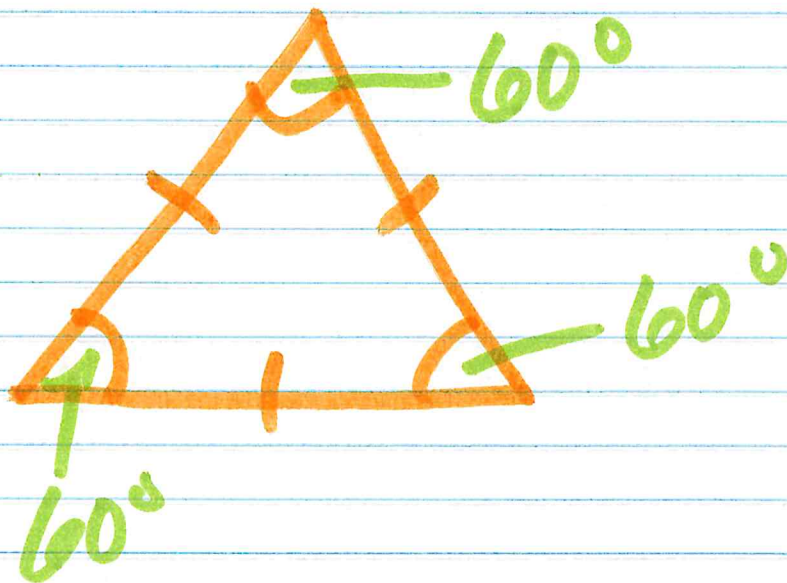
$$\begin{array}{r} 180 \\ - 150 \\ \hline 30^\circ \end{array}$$

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Base <'s with Isosceles Δ



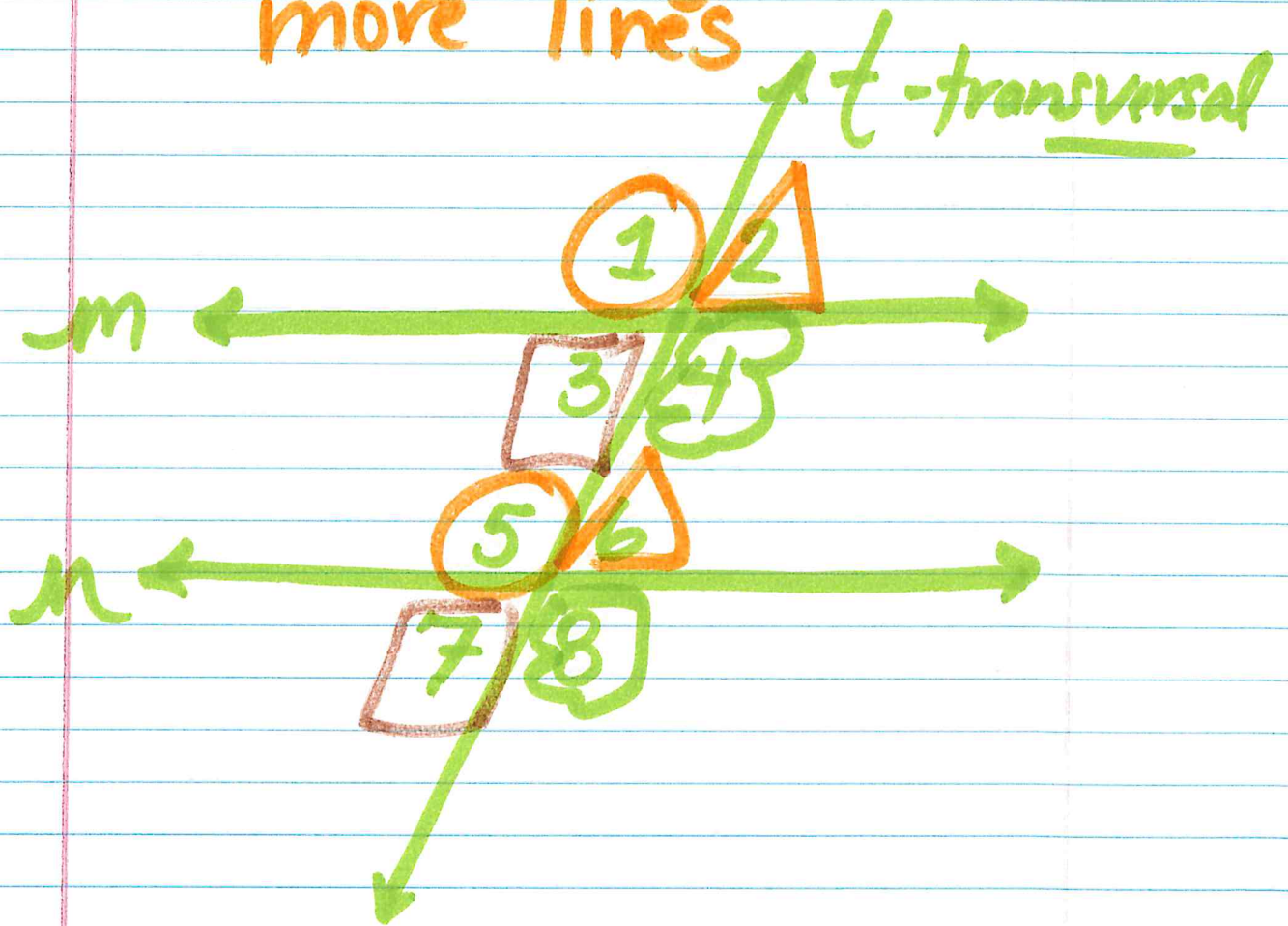
Equilateral Δ



⑥

Transversals

→ Segment or lines cuts through 2 or more lines



Corresponding <'s

(same location)

$$m \angle 1 \cong m \angle 5$$

$$m \angle 2 \cong m \angle 6$$

$$m \angle 3 \cong m \angle 7$$

$$m \angle 4 \cong m \angle 8$$