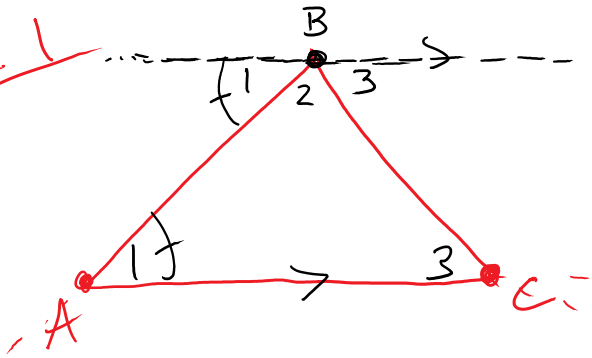
Notes

Tuesday, December 09, 2014 7:49 AM

7.1 - 7.2 Notes

5 semi - Random Theorems

Thm 1

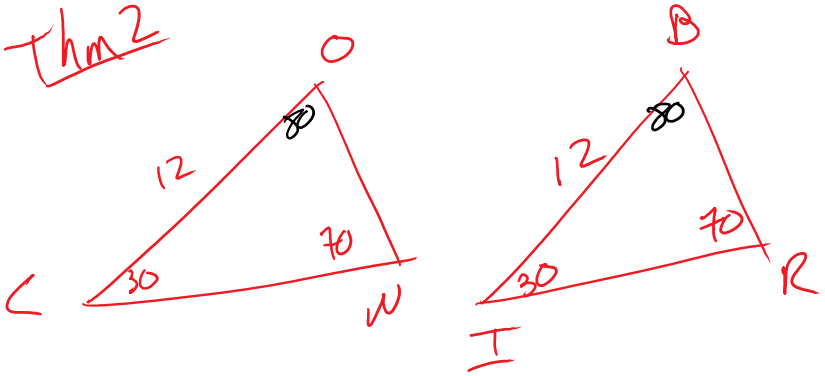


$\angle A + \angle B + \angle C = 180$

$\angle 1 + \angle 2 + \angle 3 = 180$

$\therefore$ Sum of the $\angle$'s of a $\triangle = 180^\circ$

Thm 2



No Choice Thm

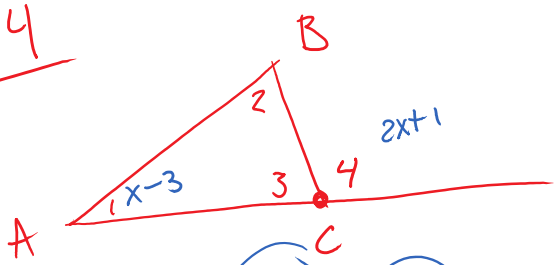
2 $\angle$'s of one $\triangle$ are $\cong$ to 2 $\angle$'s of another $\triangle$ → the third pair have $\angle$'s must be $\cong$.

Thm 3

AAS → $\cong$ $\triangle$'s

Thm 4

Exterior $\angle$ of a $\triangle$ is equal to the sum of the remote interior $\angle$'s.



$\angle 4 = \angle 1 + \angle 2$

$\angle 3 + \angle 4 = 180$

$\angle 3 + \angle 1 + \angle 2 = 180$

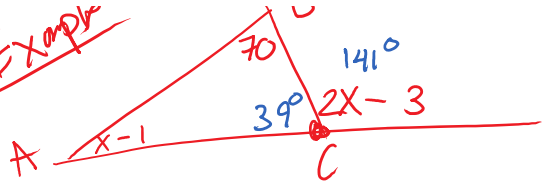
$m\angle 4 > m\angle 1$

$m\angle 4 > m\angle 2$

Example

$m\angle BCA = 39^\circ$

Exampl

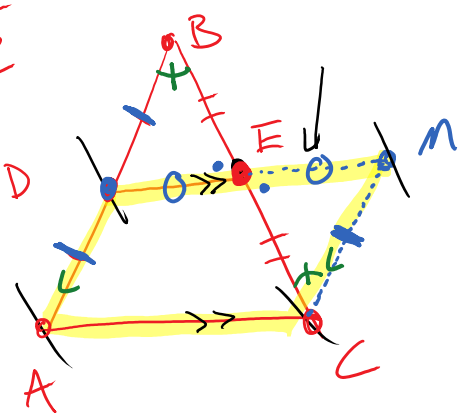


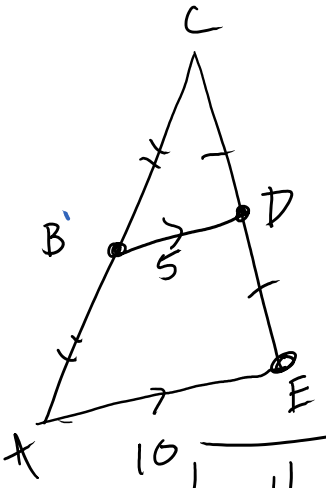
$m\angle BCA = 39^\circ$

$x-1+70 = 2x-3$

$72 = x$

Thm 5



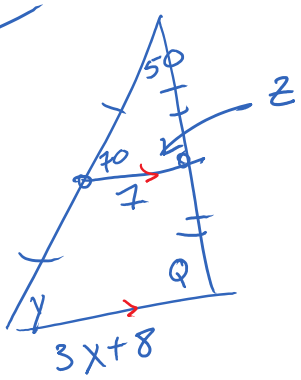


Given: D is a midpt
B is a midpt

Pon: $\overline{BD} \parallel \overline{AE}$ and $BD = \frac{1}{2}AE$

Midline Theorem

Example



$x = 2$

$y = 70$

$z = 60$

$Q = 60$

$3x+8 = 14$