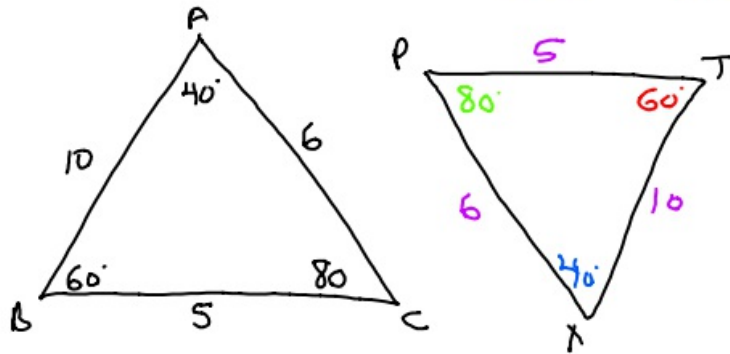


11-5-19 2<sup>nd</sup> Geo

### Congruent Triangles

$\cong$

① Fill in  $\triangle XTP$  if  $\triangle ABC \cong \triangle XTP$ .



② If  $\triangle TPX \cong \triangle ARD$ , then

a.)  $\angle P \cong \angle R$

b.)  $\angle D \cong \angle X$

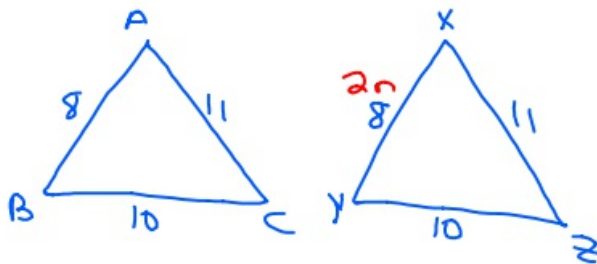
c.)  $\overline{TX} \cong \overline{AD}$

d.)  $\overline{AP} \cong \overline{PT}$

③  $\triangle ABC \cong \triangle XYZ$  with

$AB = 8$ ,  $BC = 10$ , &  $AC = 11$ .

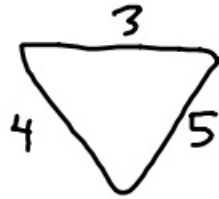
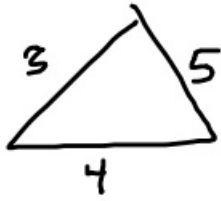
If  $XY = 2n$ , what is  $n$ ?



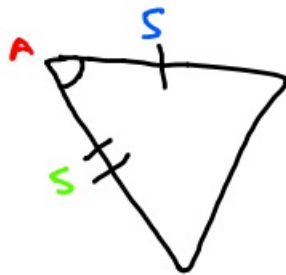
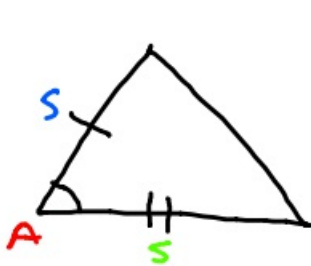
$$\frac{2n}{2} = \frac{8}{1}$$

$$n = 4$$

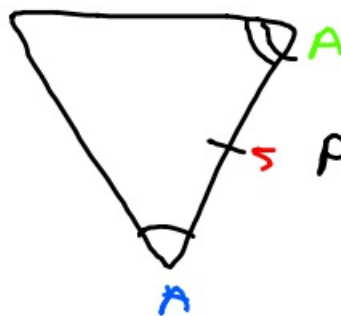
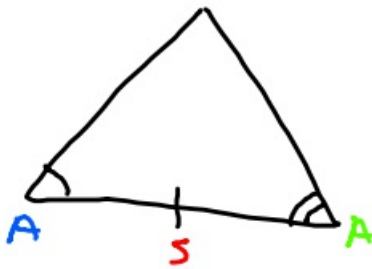
Congruent



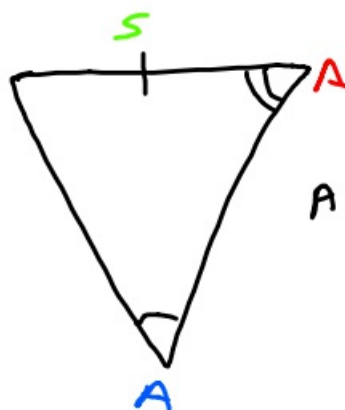
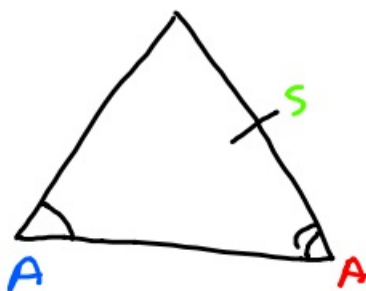
Side-Side-Side  
SSS



Side-Angle-Side  
SAS



Angle-Side-Angle  
ASA



Angle-Angle-Side  
AAS



AAA Doesn't prove  $\cong$



ASS Doesn't prove  $\cong$

| Proves $\cong$ | Doesn't Prove $\cong$ |
|----------------|-----------------------|
| SSS            | AAA                   |
| SAS            | ASS                   |
| ASA            |                       |
| AAS            |                       |

