

Chapter 4 Test Topics (Sec.1-6)

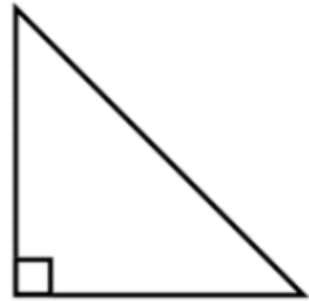
- 6 ways to prove two triangles congruent
 - By definition
 - Side-Side-Side (SSS)
 - Side-Angle-Side (SAS)
 - Angle-Side-Angle (ASA)
 - Angle-Angle-Side (AAS)
 - Hypotenuse-Leg (HL)

- Meaning of CPCTC
Corresponding
Parts of
Congruent
Triangles are
Congruent

- Label parts of isosceles triangle



- Label parts of right triangle



- Looking at two triangles, determine how they are congruent by one of the 6 ways.
 - Keep in mind that you may have to mark a reflexive side or vertical angles
- State the piece of information you need in order to prove the two triangles are congruent by the given information.
 - Be as specific as possible
 - Keep in mind that you may have to mark a reflexive side or vertical angles-this is assumed and therefore should not be one of the things you need.
- Isosceles triangles
 - If two legs are congruent, the base angles (angles across from the sides) are congruent.

- If two base angles are congruent, then the sides (legs) across from the angles are congruent.
- 5 proofs
 - Restate your given and mark diagram with the given information
 - Look for vertical angles (congruent) or reflexive side (congruent)
 - Determine if you have enough information to prove the two triangles congruent
 - If you do see next step
 - If you do not, go back to the given information and see if its possible to use that information to give you additional information.
 - Prove triangles are congruent
 - SSS- All three sides of one triangle are congruent to all three sides of another triangle
 - SAS- Two sides and the included angle of one triangle are congruent to two sides and the included angle of another triangle (remember the angle has to be “sandwiched” between the two sides/the sides have to make up the angle)
 - ASA- Two angles and the included side of one triangle are congruent to two angles and the included angle of another triangle (remember the side has to be “sandwiched” between the two angles/ the angles have to be on either side of the side)
 - AAS- Two angles and the non-included side of one triangle are congruent to two angles and the non-included side of another triangle (Side can not be between the two angles)
 - HL
 - Two right triangles-remember you cannot simply have right angles but more specifically right triangles
 - Congruent hypotenuses
 - One set of congruent legs
 - Determine if you stop your proof at the triangle congruence (SSS, SAS,ASA,AAS,HL) or your final step is CPCTC
 - CPCTC is ONLY used if your prove statement is
 - Two sides congruent
 - Two angles congruent