

Chapter 5 Test Prep

MULTIPLE CHOICE

1. Classify triangles by their... (6 points)
 - a. Sides (scalene, equilateral, isosceles)
 - b. Angles (right, acute, obtuse, equiangular)
2. Use the Exterior Angles Theorem and/or the Triangle Sum Theorem to solve for unknown variables and missing angle measures (2 points)
3. Use the Third Angles Theorem to solve for unknown variables and missing angle measures (2 points)
4. Write congruence statements. (2 points)
5. When given a congruence statement, determine which corresponding segments and/or angles are congruent, and use them to solve for unknowns. (4 points)
6. Place figures in the coordinate plane for writing a coordinate proof (2 points)
7. Know strategies for writing coordinate proofs (i.e. if you're proving triangles congruent by $SSS \cong$, then use the distance formula/Pythagorean Theorem, etc.) (2 points)

SHORT ANSWER

8. Given two corresponding and congruent pieces of information in two triangles, determine the third pieces of information needed to prove two triangles \cong by $SSS \cong$, $SAS \cong$, $HL \cong$, $ASA \cong$, and/or $AAS \cong$. (12 points)
9. Given a diagram, determine if you have/can find enough information to prove two triangles congruent. If so, state the theorem used ($SSS \cong$, $SAS \cong$, $HL \cong$, $ASA \cong$, or $AAS \cong$) (20 points)
10. Write two-column proofs (30 points)
 - a. Prove two triangles congruent by $SSS \cong$, $SAS \cong$, $HL \cong$, $ASA \cong$, and/or $AAS \cong$
 - b. Use CPCTC to say why corresponding parts of congruent triangles are congruent.