Section \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_

Prove Statements about Segments and Angles

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| Vocabulary | Definition | Example |
| PROOF | A proof is a logical argument that shows a statement is true. | Statements | Reasons |
| 1.2.3.4.5.***\* the last statement is ALWAYS what you are trying to prove*** | 1. GIVEN2.3.4.5.***\* the first reason(s) is ALWAYS your GIVEN(s)*** |
| TWO-COLUMN PROOF | A two-column proof has numbered statements and corresponding reasons that show an argument in logical order. example   |
| THEOREM | A theorem is a statement that can be proven. |  |
| CONGRUENCE of SEGMENTS | Reflexive | For any segment $\overbar{AB}$**, \_\_\_\_** $≅$ **\_\_\_\_** |  |
| Symmetric | If $\overbar{AB}$ $≅$ $\overbar{CD}$ ,then **\_\_\_\_** $≅$ **\_\_\_\_** |
| Transitive | If $\overbar{AB}$ $≅$ $\overbar{CD}$ and $\overbar{CD}$ $≅$ $\overbar{EF}$, then **\_\_\_\_** $≅$ **\_\_\_\_** |
| CONGRUENCE of ANGLES | Reflexive | For any angle A, **\_\_\_\_** $≅$ **\_\_\_\_** |  |
| Symmetric | If ‹A $≅$ ‹B, then **\_\_\_\_** $≅$ **\_\_\_\_** |
| Transitive | If ‹A $≅$ ‹B and ‹B $≅ $‹C, then **\_\_\_\_** $≅$ **\_\_\_\_** |