**2.6 Proving Segment and Angle Statements**

**Properties of Equality: Addition, Subtraction, Multiplication, Division, Substitution, Distributive, Reflexive, Symmetric, Transitive**

**Properties of Congruence (p.o.c.)**

**Segments Angles**

**Reflexive p.o.c**

**Symmetric p.o.c.**

**Transitive p.o.c.**

**In proofs we will often want to use properties of equality and congruence, so we will switch between and .**

**Ex. Given: M is the midpoint of AB**

**Prove: AB= 2(AM)**

**Proof of Symmetric p.o.c (angles)**

**If <A <B then <B <A.**

**G:**

**P:**

**For all proofs you must copy the entire proof, include a picture, the given, and the prove statement.**