**Geometry Lesson 1-9: Students will construct a square and a rhombus.**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**GEOMETRY NOTES Special Quadrilaterals Page 1-9**

**[1st] Can you write 100 using only 9’s?**

**[2nd] Figure A has four sides, all congruent.**

**Figure B has four angles, all congruent.**

**🡪What are the differences between**

**A and B?**

**🡪Can A and B be the same figure?**

**[3rd] Using what you know so far,**

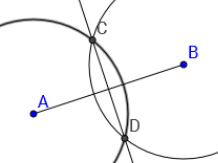
**can you construct a square?**

**FIRST THINK BEFORE YOU READ ON.**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**To construct a square, first begin with a \_\_\_\_\_\_ angle. To do this,**

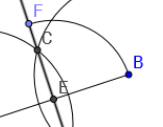
**construct a segment and its \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_.**

****

****

**Second, label the midpoint of : call this point E. Then construct**

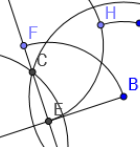
**circle E so that EB = EF. This makes two sides of your square the**

** same \_\_\_\_\_\_\_\_, and they meet at a \_\_\_\_\_\_ angle.**

**Third, construct two more arcs with the same radius as circle E:**

**center the first arc at \_\_ and the second arc at \_\_\_. The point where**

**these arcs intersect, \_\_\_, is the fourth \_\_\_\_\_\_ \_\_ \_\_\_\_ \_\_\_\_\_\_.**

****

**Finally, connect F to H and H to B.**

**[4th] How do you construct A rhombus is a quadrilateral in which all sides are \_\_\_\_\_\_\_\_\_.**

**a rhombus? 1st Construct a segment . 2nd Use your compass to measure**

**from A to B; mark off that same \_\_\_\_\_\_\_\_ from A to a different point.**

**Label this point C. 3rd Measure this same distance with your compass,**

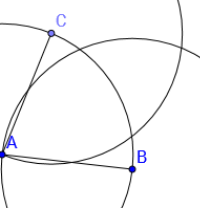
**but center the compass at \_\_: mark off this arc. 4th Measure this same**

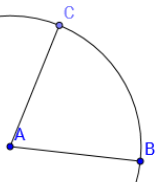
**distance, but center your compass at \_\_\_: mark off this arc so that it**

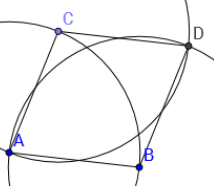
**intersects the arc with center B. 5th Label where the two arcs inter-**

**sect point D. Connect B to D and D to C.**

**\*NOTE: We call this rhombus ABDC.**

****

****

****

**[5th] On binder paper, you need to construct [a] a square, [b] a rhombus.**