☐ **DO NOW – Geometry Regents Lomac 2014-2015** **Date** 10/9 **due** 10/10 **Constructing Reflections** **2.4**

(DN) Draw line segment CD and construct the perpendicular bisector of $\overline{CD}$. Pick a random point on the perpendicular bisector and label it E. What is the relationship between points E, C, and D? (Write something other than E is on the perpendicular bisector of $\overline{CD}$.)

Name _____ **Per**_____

SLO: I can construct a **reflection** of a figure and explain how the construction works.

☐ (1) notes **Just the facts:**

☐ For a given circle, all radii are _____

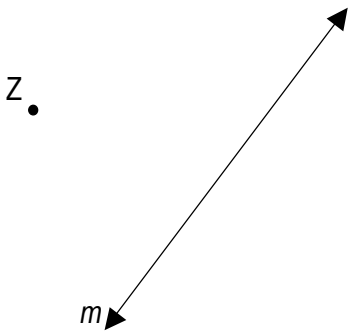
☐ The points on a perpendicular bisector are located so that they are _____

_____

☐ The line of reflection between a point and its image is the _____ of the segment that connects the point to its image.

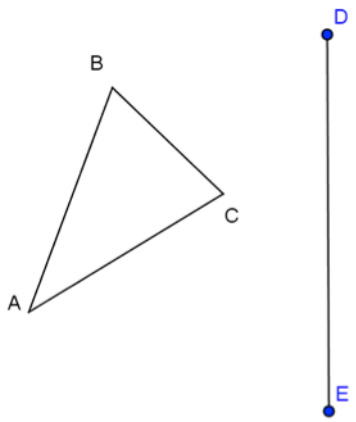
☐ (2) compass **Reflections**

☐ Use the facts above to construct the reflection of point Z across line *m*.



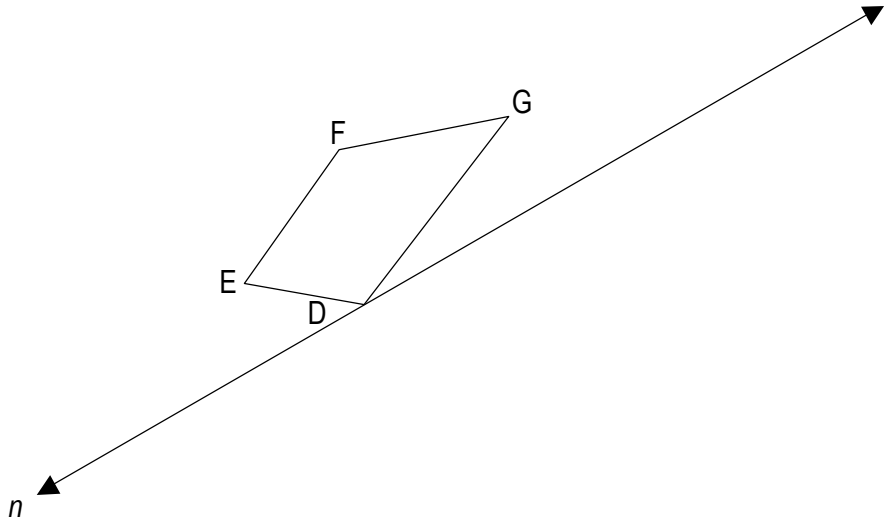
☐ (3) compass **Reflection practice** Construct the reflection of each figure across the given line or line segment.

(a) ☐

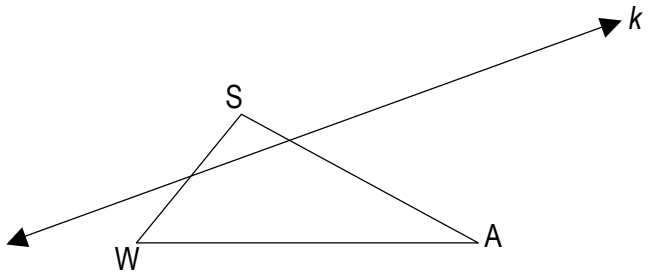


☐ (3) cont. **Reflection practice** Construct the reflection of each figure across the given line or line segment.

☐ (b)



☐ (c)



☐ (4) **Constructing reflections explained**

☐ Describe the steps you took to reflect △ABC in problem 3 and how they guarantee that you have constructed the reflection of △ABC.

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☐ (5) **Exit Ticket**

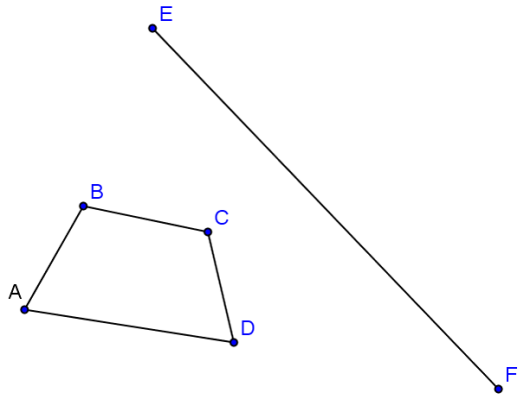
☐ (a) Draw any point S and line *m*. Do not draw point S on line *m*.

☐ (b) Construct the reflection of S across line *m* and label it S'.

☐ (c) Describe how you know your construction guarantees the reflection of S.

☐ (6) **Homework**

☐ (1) Construct the reflection of ABCD



☐ (2) On the back of this page

☐ (a) Draw acute angle ORE and construct the bisector of the angle. Label the bisector ray RS

☐ (b) Draw obtuse angle BLU and construct a copy of the angle. Label the copy B'L'U'

☐ (c) Describe the key characteristics of **rigid motions**.

☐ (d) Describe the meaning **plane** as it is used in Geometry as if you were explaining it to your 6 year old cousin