NAME: _____DATE: _____PERIOD: _____
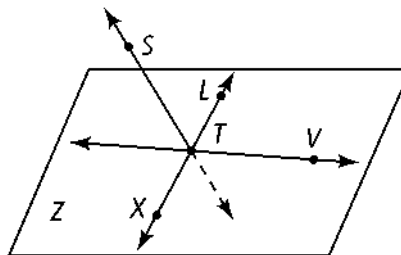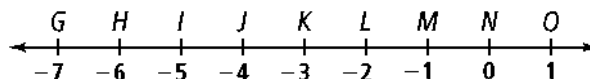
GEOMETRY – SEMESTER EXAM REVIEW

Unit 1 Review

Use the diagram at the right for Exercises 1–3. Note that in this diagram $\overleftrightarrow{ST}$ pierces the plane at T. The point S is not contained in plane Z.
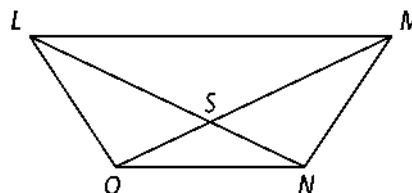
1. What is another name for plane $Z?$

2. Name two opposite rays in the diagram.

3. Where would the plane STL intersect plane $Z?$

Use the figure at right for Exercises 4–6.

4. Name two points that are 4 units from K.

5. Name a segment congruent to $\overline{GJ}$.

6. Name the coordinate of the midpoint of $\overline{NH}$.

**Use the figure at the right for Exercises 7–10.**

7. Name a pair of vertical angles.

8. Name a pair of adjacent angles with vertex M.

9. Name a pair of adjacent angles with vertex S.

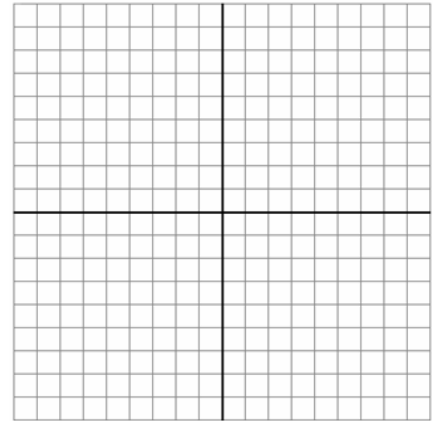**10.** Name a linear pair.

11. $\overleftrightarrow{GI}$ bisects $\angle DGH$ so that $m\angle DGI = x - 3 \; and \; m\angle IGH = 2x - 13$. What is the value of $x?$

12. $\angle 1$ and $\angle 2$ are supplementary angles. $m\angle 1$ is $4y + 7$ and $m\angle 2$ is $9y + 4$. What is $m\angle 2$?

13. What is the distance between points $M(6, -16)$ and $Z(-2, 14)$?
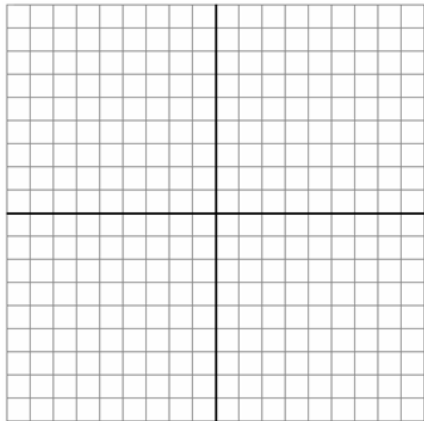
14. Determine the distance between points $L(-2,3)$ and $R(5,8)$.

15. How is naming a line segment different from naming a line?

16. Draw an obtuse angle, name it using the letters *XYZ.* Construct its bisector.

17. Draw an acute angle, name it using the letters ABC. Construct an angle congruent to ABC and name it using the letters RLM.

18. Draw a horizontal line and name it using the letters RS. Construct the segment perpendicular to the line and name it using letters MN.