Basics of Geometry III

**Use the picture for 1-4.**

1. Name a line. \_\_\_\_\_\_\_\_\_\_\_\_\_

2. Name a segment on line *n*. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Name a ray with endpoint *A*. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Name the plane. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Sketch each figure for 5-6.**

5. two rays that form a straight line and that intersect at point P.

6. two line segments that both have a midpoint at point M.



7. Name the angle in as many ways as possible.

**Determine the measure of each angle. Then describe each angle as acute, right, obtuse, or straight.**

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| 8. GE_MTXEDI363113_032Tm∠ABC  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  9. GE_MTXEDI363113_033Tm∠DEF  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | GE_MTXEDI363113_034T 10. m∠KLM  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

11. *S* is the midpoint of  *RS* = 2*x* + 4, and *RT* = 8*x*. Find *ST*.

12. R, S, and T are collinear, and S is between R and T. If *RS* = x + 1, *ST* = 2x − 2, and *RT* = 5x − 5, find *RT*.

13. $ XZ $bisects ∠*WXY*, and m∠*WXZ* = 90°. Find m∠*WXY*.

14. m∠*PQR* if QT bisects ∠*PQR*, m∠*RQT* = (10*x* − 13)°, and m∠*PQT* = (6*x* + 1)°.

15.