

Name:

Date:

Period:

HW #1-10

Complete the following problems (do not submit online). Check answers posted on Edlio.

- The cities shown on the map lie approximately in a straight line. Find the distance from Albuquerque, New Mexico to Provo, Utah.



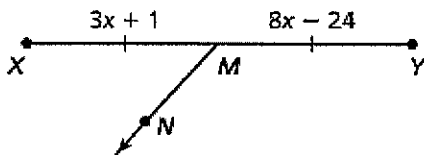
- Point S is between points R and T on $\overline{RT}$. Use the information to write an equation in terms of x . Then solve the equation and find RS, ST, and RT.

$$RS = 2x + 10$$

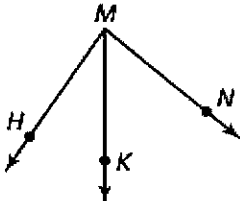
$$ST = x - 4$$

$$RT = 21$$

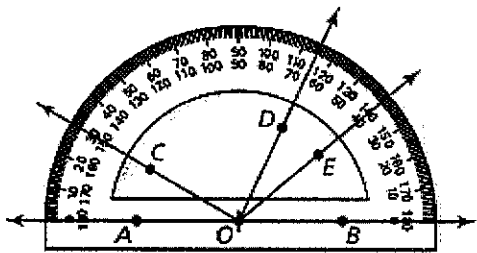
- Identify the segment bisector of $\overline{XY}$. Then find XY.



- Name three different angles in the diagram.



- For each part, find the angle measure. Then classify the angle.

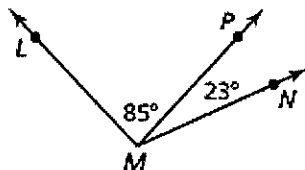


a. $m\angle AOC$

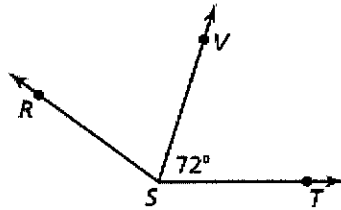
b. $m\angle COB$

c. $m\angle EOD$

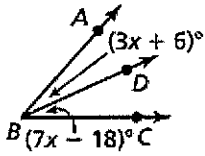
- Find $m\angle LMN$.



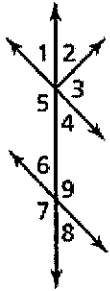
7. $m\angle RST = 114^\circ$. Find $m\angle RSV$.



8. $\overrightarrow{BD}$ bisects $\angle ABC$. Find $m\angle ABD$, $m\angle CBD$, and $m\angle ABC$.



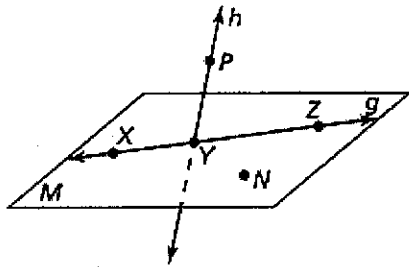
9. Use the diagram to answer both parts.



- Identify the linear pair(s) that include $\angle 7$.
- Are $\angle 2$ and $\angle 5$ vertical angles? Explain your reasoning.

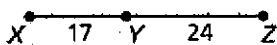
10. Write and solve an algebraic equation to find the measure of each angle: The measure of an angle is 12° more than twice the measure of its complement.

11. Use the diagram for the following:

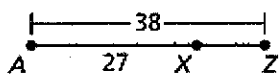


- Given another name for plane M .
- Name a line in the plane.
- Name a line intersecting the plane.
- Name two rays.
- Name a pair of opposite rays.
- Name a point NOT in plane M .

12. Find XZ.

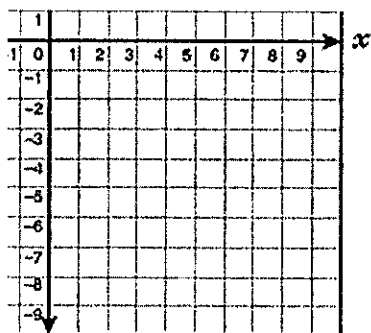


13. Find XZ.



14. Find the coordinates of the midpoint M of $\overline{ST}$. Then find the distance between points S and T . Leave answers in exact form (simplified completely) and rounded to two decimal places.

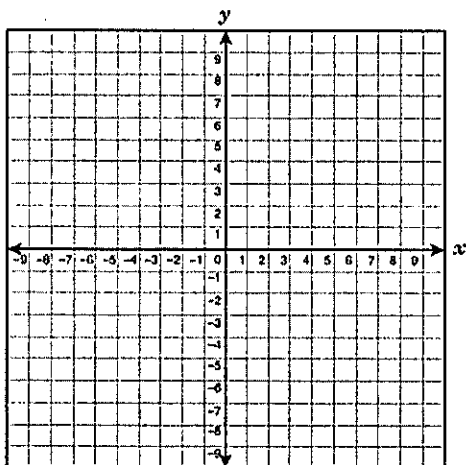
$S(1, -5)$ and $T(7, -2)$



15. The midpoint of $\overline{JK}$ is $M(6, 3)$. One endpoint is $J(14, 9)$. Find the coordinates of endpoint K .

16. Find the perimeter of the polygon with the given vertices. Leave answers in exact form (simplified completely) and rounded to two decimal places.

$E(6, -2)$, $F(6, 5)$, $G(-1, 5)$



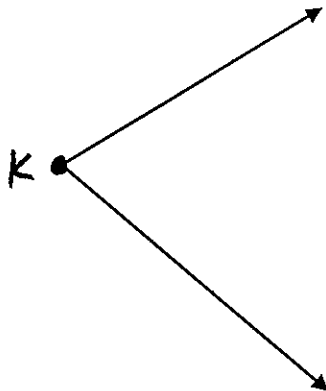
17. $\angle 1$ and $\angle 2$ are complementary angles. Given $m\angle 1 = 12^\circ$, find $m\angle 2$.

18. $\angle 3$ and $\angle 4$ are supplementary angles. Given $m\angle 3 = 116^\circ$, find $m\angle 4$.

19. Construct a segment congruent to $\overline{XY}$



20. Construct an angle congruent to $\angle K$



21. Construct the angle bisector of $\angle Z$

