Geometry- Mrs. Tilus
Chapter 1.1 Worksheet

Name: Lynne Tilus

Write in words what each of the following symbols means. Then draw an example for each.

1. Q

Point Q

2. $\overline{MN}$

Line Segment MN

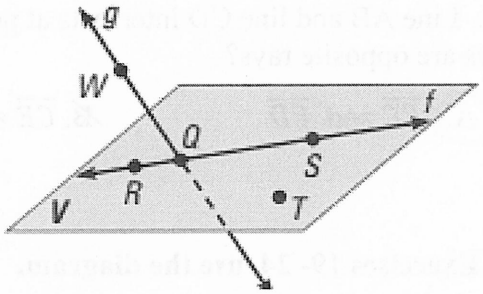
3. $\overrightarrow{ST}$

Ray ST

4. $\overleftrightarrow{FG}$

Line FG

In Exercises 5-9, use the diagram.



5. Give other names for $\overleftrightarrow{WQ}$

line g, $\overleftrightarrow{QW}$

6. Give another name for plane V

Plane RQS, Plane QST, Plane RQT, ...

7. Name three points that are collinear. Then name a fourth Point that is not collinear with these three points.

Points RQS; Point T

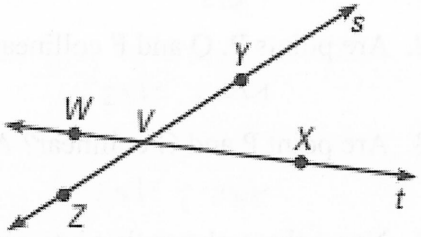
8. Name a point that is not coplanar with R, S, and T.

Point W.

9. Is point W coplanar with points Q and R?

Yes, through any 3 points lies a plane.

In Exercise 10-13, use the diagram.



10. What is another name for $\overline{ZY}$?

$\overline{YZ}$

11. Name all rays with endpoint V.

$\overrightarrow{VW}$, $\overrightarrow{VY}$, $\overrightarrow{VX}$, $\overrightarrow{VZ}$

12. Name two pairs of opposite rays.

$\overrightarrow{VW}$ and $\overrightarrow{VX}$, $\overrightarrow{VZ}$ and $\overrightarrow{VY}$

13. Give another name for $\overrightarrow{WV}$

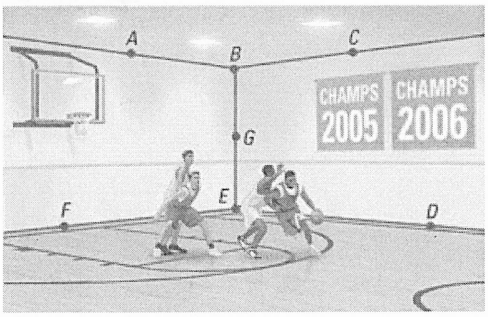
$\overrightarrow{WX}$

14. A student says that $\overrightarrow{VW}$ and $\overrightarrow{VZ}$ are opposite rays because they have the same endpoint. Describe the error.

Points V, W, Z would need to be collinear AND point V would need to be between points W and Z.

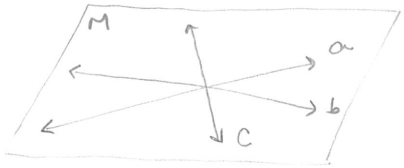
15. What statement about the diagram is true?

~~A~~. A, B and C are collinear
(B.) C, D, E and G are coplanar
~~C~~. B lies on $\overrightarrow{GE}$
~~D~~. $\overrightarrow{EF}$ and $\overrightarrow{ED}$ are opposite rays

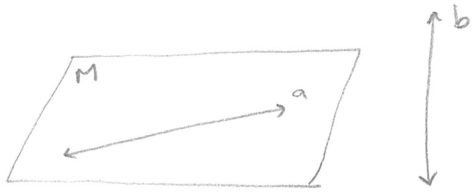


Sketch the figure described – *try your best.* ☺

16. Three lines that lie in a plane and intersect at one point

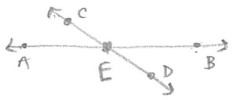


17. One line that lies in a plane and one line that does not lie in the plane.

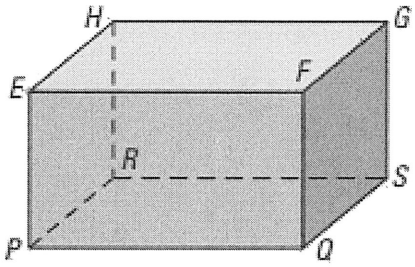


18. Line AB and line CD intersects at point E, with point E between A and B and between C and D. Which rays are opposite rays?

(A.) $\overrightarrow{EC}$ and $\overrightarrow{ED}$ B. $\overrightarrow{CE}$ and $\overrightarrow{DE}$ C. $\overrightarrow{AB}$ and $\overrightarrow{BA}$ D. $\overrightarrow{AE}$ and $\overrightarrow{BE}$



In Exercises 19- 24, use the diagram.



19. Name the intersection of $\overleftrightarrow{PR}$ and $\overleftrightarrow{HR}$

Point R

20. Name the intersection of plane EFG and plane FGS.

$\overleftrightarrow{FG}$

21. Name the intersection of plane PQS and plane HGS.

$\overleftrightarrow{RS}$

22. Are points P, Q and F collinear? Are they coplanar?

No ; Yes

23. Are point P and G collinear? Are they coplanar?

Yes ; Yes

24. Name three planes that intersect at point E.

Plane EHR , Plane EHG , Plane EFQ

Graph the inequality on a number line. Tell whether the graph is a segment, a ray or rays, a point or a line.

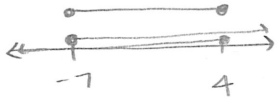
25. $x \leq 3$

Ray

26. $x \geq -1$ or $x \leq 5$

Line

27. $-7 \leq x \leq 4$



Line Segment