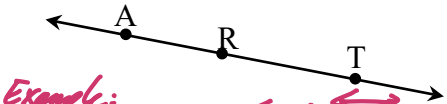
Name Answers Date

1.1 – Points, Lines, and Planes – Part 1

Name each line two different ways.

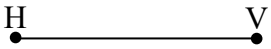
1) 

$\overleftrightarrow{PT}$, $\overleftrightarrow{TP}$

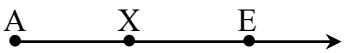
2) 

Example: $\overleftrightarrow{AR}$, $\overleftrightarrow{RA}$, $\overleftrightarrow{AT}$, $\overleftrightarrow{TA}$, $\overleftrightarrow{AT}$, $\overleftrightarrow{TA}$

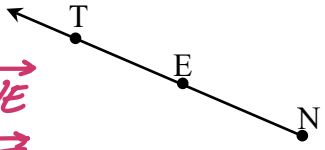
Name each line segment or ray two different ways.

3) 

$\overline{HV}$, $\overline{VH}$

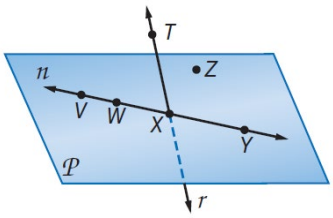
4) 

$\overrightarrow{AE}$, $\overrightarrow{AX}$

5) 

$\overrightarrow{NE}$
$\overrightarrow{NT}$

Use the figure for #6-11 to name each of the following.



6) As many lines as possible containing point W.

$\overleftrightarrow{VW}$, $\overleftrightarrow{WV}$, $\overleftrightarrow{WX}$, $\overleftrightarrow{XW}$, $\overleftrightarrow{XY}$, $\overleftrightarrow{YX}$, $\overleftrightarrow{VX}$, $\overleftrightarrow{XV}$, $\overleftrightarrow{WY}$, $\overleftrightarrow{YW}$, $\overleftrightarrow{VY}$, $\overleftrightarrow{YV}$

7) Two alternate names for Plane *P*.

Example: Plane XYZ
Plane VWX

8) One name for a plane containing Point Z.

Example: Plane VZY

9) As many lines as possible containing point T.

$\overleftrightarrow{TX}$, $\overleftrightarrow{XT}$

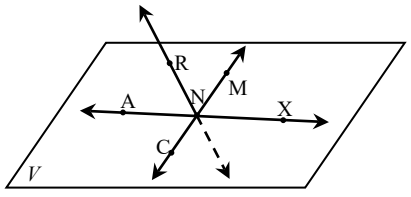
10) Alternate names for $\overrightarrow{YX}$

$\overrightarrow{YW}$, $\overrightarrow{YV}$

11) The intersection between Line *r* and Plane *P*.

Point X

Use the figure for #12-17 to name each of the following.



12) Name two segments shown in the figure.

Example: $\overline{AN}$, $\overline{NX}$

13) What is the intersection of $\overleftrightarrow{CM}$ and $\overleftrightarrow{RN}$

Point N

14) What are two other ways to name plane *V*?

Example: Plane ANM
Plane CNX

15) Name two rays shown in the figure.

Example: $\overrightarrow{NR}$, $\overrightarrow{NX}$

16) Name the pair of opposite rays with endpoint *N*.

Example: $\overrightarrow{NX}$ and $\overrightarrow{NA}$

17) How many distinct lines are shown in the drawing?

3

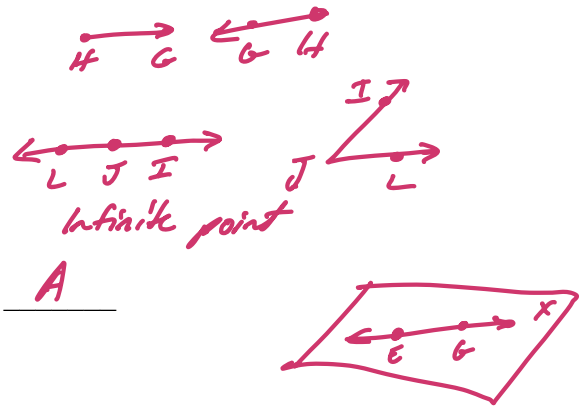
For Exercises 14–19, without given a diagram of a figure, determine whether each statement is *always (A), sometimes(S),* or *never (N)* true.

18) $\overrightarrow{GH}$ and $\overrightarrow{HG}$ are the same ray. N

19) $\overrightarrow{JI}$ and $\overrightarrow{JL}$ are opposite rays. S

20) A plane contains only three points. N

21) If $\overleftrightarrow{EG}$ lies in plane *X,* point *G* lies in plane *X.* A



22) Reasoning: Is it possible for one ray to be shorter in length than another? Explain.

No. Since all rays go infinitely in one direction.