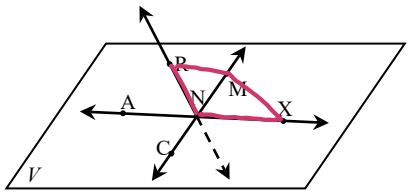
Name Answers Date

1.1 – Points, Lines, and Planes – Part 2

Use the figure for #1-2 to do the following.



1) Name three collinear points.

Example: Points A, N, and X

2) Are points *R*, *N*, *M*, and *X* coplanar?

No. They don't lie on the same plane.

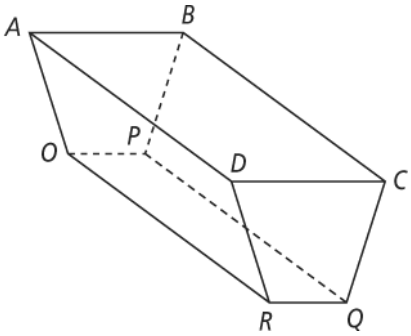
Use the figure for #3-7. Name the intersection of each pair of planes or lines.

3) Planes ABP and BCD

$\overleftrightarrow{AB}$

4) Planes *BCD* and *BCQ*

$\overleftrightarrow{BC}$



5) $\overrightarrow{RQ}$ and $\overrightarrow{RO}$

Point R

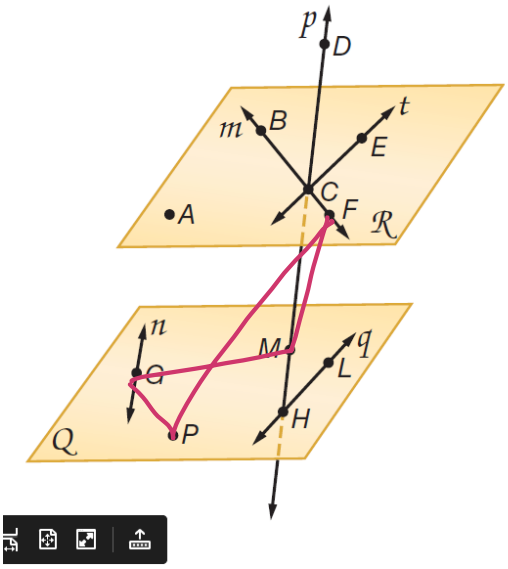
6) $\overrightarrow{OP}$ and $\overrightarrow{QP}$

Point P

7) planes *ADR* and *DCQ*

$\overleftrightarrow{DR}$

Use the figure for #8-16. Name the intersection of each pair of planes or lines.



8) Name the lines that are only in plane *Q*.

Example: Lines n and q

9) How many planes are labeled in the figure?

2

10) Name the plane containing the lines *m* and *t*.

Example: Plane R

11) Name the intersection of lines *m* and *t*.

Point C

12) Name a point that is not coplanar with points *A*, *B*, and *C*.

Example: Point P

13) What is another name for line *t*?

Example: $\overleftrightarrow{CE}$

14) Name the points not contained in a line shown.

Points A and P

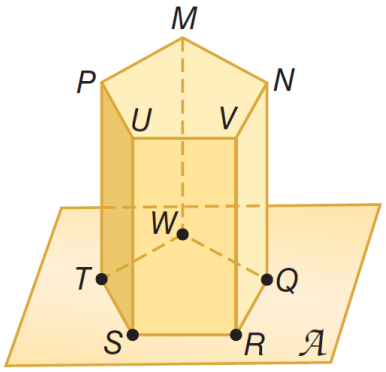
15) Are points *F*, *M*, *G*, and *P* coplanar? Explain.

No. They don't lie on the same plane.

16) Does line *n* intersect line *q*? Explain.

Eventually, all coplanar lines intersect unless they're parallel

Use the figure for #3-7. Name the intersection of each pair of planes or lines.



17) Name two collinear points.

Example: Point M and N

18) How many planes appear in the figure?

7

19) In what line do planes A and QRV intersect?

$\overleftrightarrow{QR}$

20) Do plane A and plane MNP intersect? Explain.

No. If plane MNP is extended in all directions, it appears to be parallel to plane A.

21) Are points T, S, R, Q, and V coplanar? Explain.

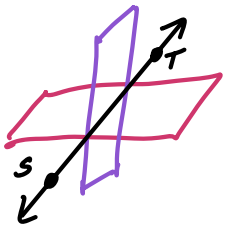
No. The 5 points are not on the same plane.

22) Are points T, S, R, Q, and W coplanar? Explain.

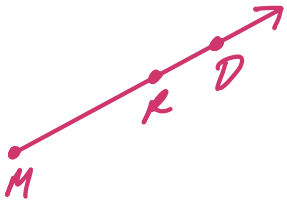
Yes, they form a plane in the form of a pentagon.

Draw a figure to fit each description

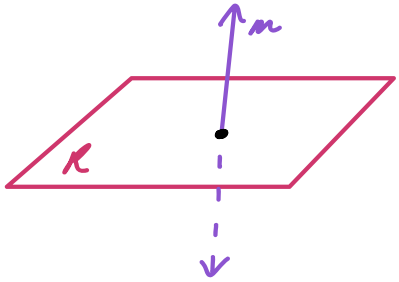
23) Draw a figure of two planes that intersect in $\overleftrightarrow{ST}$.



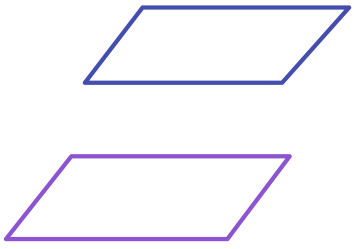
24) Two rays $\overrightarrow{MR}$ and $\overrightarrow{MD}$ that form the exact same ray.



25) Line m intersects plane R at a single point.



26) Two planes that do not intersect.



27) Points X and Y lie on $\overleftrightarrow{CD}$.

28) Three lines intersect at point J but do not all lie in the same plane.