

Key

Use the above figure.

1. a. Are points W, Y, and X collinear?

No

- b. Name line m in three different ways.

Answers Vary (ex. \overleftrightarrow{ZY} , \overleftrightarrow{ZW} , \overleftrightarrow{YW})

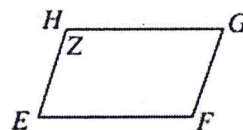
- c. **Critical Thinking** Why do you think arrowheads are used when drawing a line or naming a line such as \overleftrightarrow{ZW} ?

Answers Vary. To show that the line continues in both directions.

2. List three different names for plane Z.

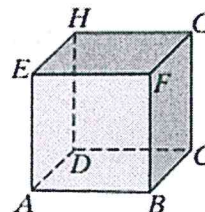
Answers Vary.

Ex. Plane HEF, Plane GFE, Plane FGH

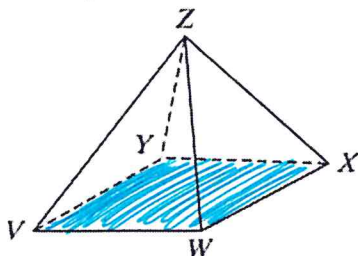


3. Name two planes that intersect in \overleftrightarrow{BF} .

Plane EAB and Plane GCF

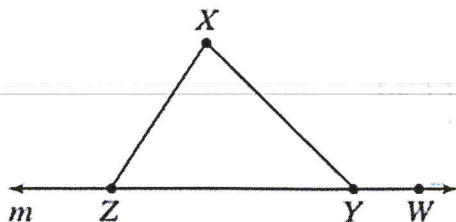


4. a. Shade plane VWX.



- b. Name a point that is coplanar with points V, W, and X.

Y



5. Use the figure above.

- a. Name an angle that is not included in the triangle.

$\angle WYX$

- b. Name two unique rays.

\overrightarrow{YZ} \overrightarrow{ZY}

Answers
Vary.

6. Is the definition below correct? If not, provide a counterexample and rewrite the definition so that it is correct.

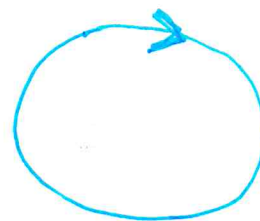
A ray is a line that only goes in one direction.

No, the definition is not precise enough.

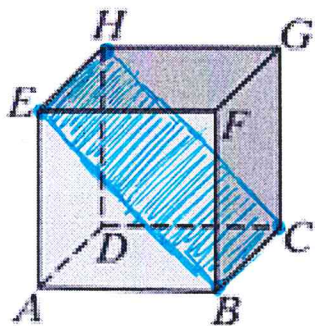
Key concepts the definition must include:

- One endpoint
- One side continues to infinity
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COUNTEREXAMPLE



7. Using the below figure, shade the plane containing points H, E, C, and B.



8. Using the above diagram, give an example of 4 points which are not coplanar.

Answers Vary.