### 1.4 Sketching Intersections

Objective: Name simple figures and their intersections.

Figures intersect if they have any points in common.

The intersection of two or more figures is the point or points that the figures have in common.

Postulate 3: If two lines intersect, then their intersection is a point.


Postulate 4: If two planes intersect, then their intersection is a line.

Example 1: Pg. 23 bottom pictures.
A. Name the intersection of $\overleftrightarrow{\mathrm{PS}}$ and $\overleftrightarrow{\mathrm{QR}}$.

$$
\text { point } R
$$

B. Name the intersection of $\overleftrightarrow{\mathrm{TV}}$ and $\overleftrightarrow{\mathrm{QU}}$. point U
C. Name the intersection of $\overleftrightarrow{\mathrm{PS}}$ and $\overleftrightarrow{\mathrm{UV}}$.

## no point of intersection

D. Name the intersection of planes X and Y .

## line $p$

E. Name the intersection of planes Y and Z .
line $q$
F. Name the intersection of planes Z and X .
no intersection

Name
1.4
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Notes 1.5

