

Chapter 1

Practice Worksheet 2

Name _____

(Use with Section 1-6)

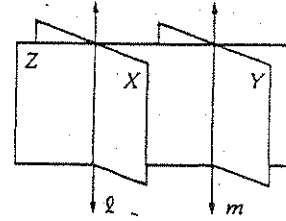
Complete each sentence.

Example: Planes X and Y are parallel.

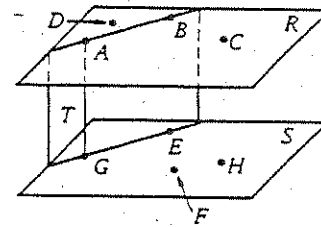
The intersection of planes X and Z is line ℓ

The intersection of planes Y and Z is line m

What seems to be true about lines ℓ and m ? They are parallel



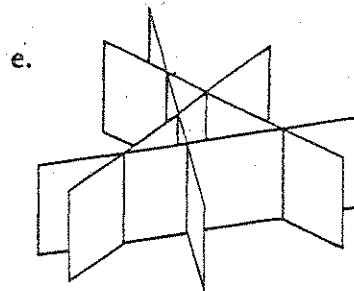
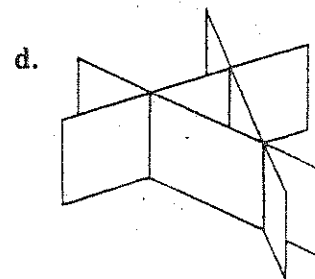
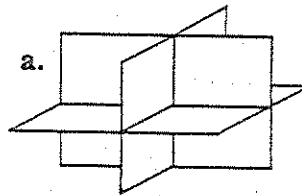
Plane T contains points A , B , E , and G . Plane R contains points A , B , C , and D , and plane S contains points E , F , G , and H .
 $\overline{AG} \perp R$ and $\overline{AG} \perp S$.



- Name two perpendicular lines. _____
- Name two parallel lines. _____
- Name a set of coplanar points. _____
- Name two sets of concurrent lines. _____
- Name two lines on S to which \overline{AG} is perpendicular. _____
- Name a plane perpendicular to T . _____
- Name two parallel planes. _____

Match each situation with a lettered drawing.

- Three parallel planes
- Four parallel planes
- Three planes that intersect at a single point
- Three planes that intersect in pairs
- Four planes that intersect in triples



Name _____

Decide whether each statement is *true* or *false* and write the word in the blank.
If false, draw a counterexample.

Counterexamples

- _____ 1. If $\angle 1$ and $\angle 2$ are complementary, then $\angle 1$ and $\angle 2$ are adjacent.
- _____ 2. If $\angle 1$ and $\angle 2$ are congruent, then $\angle 1$ and $\angle 2$ are vertical angles.
- _____ 3. If $\angle 1$ and $\angle 2$ are congruent, then the measure of $\angle 1$ and the measure of $\angle 2$ are equal.
- _____ 4. If $\angle 1$ and $\angle 2$ are vertical angles, then $\angle 1$ and $\angle 2$ are congruent.
- _____ 5. If $\angle 1$ and $\angle 2$ are congruent and supplementary, then $\angle 1$ and $\angle 2$ form a linear pair.
- _____ 6. If $\angle 1$ and $\angle 2$ form a linear pair and $\angle 1$ is a right angle, then the measure of $\angle 2$ is 90.
- _____ 7. If $\angle 1$ and $\angle 2$ are supplementary, then the measure of $\angle 1$ is less than 180.
- _____ 8. If $\angle 1$ and $\angle 2$ are complementary, then both angles are acute.
- _____ 9. If $\angle 1$ and $\angle 2$ are adjacent angles, then $\angle 1$ and $\angle 2$ are congruent.
- _____ 10. If $\angle 1$ and $\angle 2$ are adjacent and form a right angle, then they are congruent.
- _____ 11. If $\angle 1$ and $\angle 2$ are adjacent and congruent, then their common ray is an angle bisector.
- _____ 12. If \overline{BA} and \overline{BC} are perpendicular, then $\angle ABC$ is a right angle.
- _____ 13. If $\angle 1$ and $\angle 2$ are a linear pair, then $\angle 1$ and $\angle 2$ are adjacent.