H. Geom. 3-D Planes **Name**_____

1. Fill in the chart below indicating all possible relations for each pair of objects (there will often be more than one answer). Choose from the following list: skew (s), parallel (*//*), or perpendicular (⊥).

	Horizontal Plane	Vertical Plane	Horizontal Line	Vertical Line
Vertical Line				
Horizontal Line				
Vertical Plane				
Horizontal Plane				

2. Answer the following: **A**lways, **S**ometimes, or **N**ever.

a. Two lines perpendicular to the same line are parallel. _____

b. Two lines perpendicular to the same line are skew. _____

c. Two lines perpendicular to the same line intersect. _____

d. Two horizontal planes intersect each other. _____

e. Two vertical planes intersect each other. _____

f. A horizontal and a vertical plane intersect each other. _____

g. Two planes ⊥ to the same line are ⊥ to each other. _____

h. Two planes ⊥ to the same plane intersect each other. _____

3. Each interior angle of a regular polygon is 170° *larger* than each exterior angle. How many sides does it have?