

4. (8 pts) Determine whether the following statements are true for

- ALL models of incidence geometry.
- SOME models of incidence geometry, but not all.
- NONE of the models of incidence geometry. (i.e., False for all models of incidence geometry.)

[Circle the correct answer below.]

ALL SOME NONE If P and Q are distinct points that lie on a line l , then there exists another point R , distinct from P and Q , that also lies on l .

ALL SOME NONE Every point lies on at least two distinct lines.

ALL SOME NONE There exists a line that contains exactly one point.

ALL SOME NONE There exists a line that contains exactly two points.