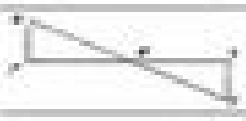
Geometry

C17

1. GENERALIZATIONS THAT ARE DEFINITIONS

STATEMENTS	GENERALIZATIONS
a. Given Statement: AB bisects $\overline{CD}$ Deduction: $\overline{\quad} \cong \overline{\quad}$ 	Definition of bisect: To bisect means to divide into two congruent parts.
b. Given Statement: $\overline{QS}$ is perp. to $\overline{PR}$ Deduction: $\angle\_\_$ is a rt. $\angle$ 	
c. Given Statement: M is the midpoint of $\overline{GO}$. Deduction: $\overline{\quad} \cong \overline{\quad}$ 	Definition of midpoint: The midpoint of a segment divides it into two congruent parts.
d. Given Statement: $\overline{PE} \perp \overline{PG}$ Deduction: $\angle\_\_$ is a $\angle\_\_$ angle 	Definition of perpendicular: Lines, segments, or rays are perpendicular if and only if the lines containing them form right angles.
e. Given Statement: $\angle 1$ and $\angle 2$ are supplementary. Deduction: $\angle 1 + \angle 2 = \angle\_\_$ 	Definition of supplementary: Two angles are supplementary if and only if the sum of their measures is 180°.
f. Given Statement: $\angle 1$ and $\angle 2$ are complementary. Deduction: $\angle 1 + \angle 2 = \angle\_\_$ 	Definition of complementary: Two angles are complementary if and only if the sum of their measures is 90°.

2. GENERALIZATIONS THAT ARE CONCLUSIONS

STATEMENTS	GENERALIZATIONS
a. Given Statement: The figure is given. Deduction: $\overline{AC} \cong \overline{\quad}$ 	A segment is congruent to itself.
b. Given Statement: The figure is given. Deduction: $\angle G \cong \angle\_\_$ 	An angle is congruent to itself.
c. Given Statement: $\angle 1$ and $\angle 2$ are right angles. Deduction: $\angle\_\_ \cong \angle$ 	All right angles are congruent.
d. Given Statement: The figure is given. Deduction: $\angle\_\_$ is supplementary to $\angle\_\_$ 	Two angles of a linear pair are supplementary.