Geometry **Reasoning - Review** **Name:**

1. Write out each of the definitions or theorems below. Include a well labeled diagram that shows what the definition or theorem says.

a) angle bisector def.

b) midpoint def.

c) perpendicular lines def

d) vertical angles thm

e) linear pair angles thm

f) congruent supplements thm

No diagram necessary for the last three.

g) right angles thm

h) reflexive thm

i) transitive thm

2. Write an example of each of the following using the two phrases
p: pigs can fly *q: fish can sing*

a. biconditional

b. disjunction

c. conjunction

d. negation of *q*

e. conditional

f. converse of (e)

g. inverse of (e)

h. contrapositive of (e)

i. which of these is logically equivalent to (e)?

3. Make a labeled diagram for each of the folllowing

a) M is the midpoint of $\overline{DE}$, and $\overline{AM} \perp \overline{DE}$.

b) $\angle PQR$ is a right angle and is bisected by $\overrightarrow{QT}$