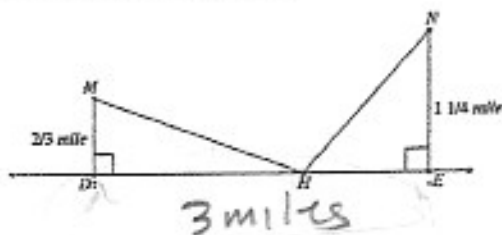Name _____

Please work ON this sheet. Include a <u>sketch</u> and <u>explanation</u> of your reasoning for each solution.

1.)  Two middle schools, at $M$ and $N$, are going to send their students to a new high school, at $H$, that is to be built along the main road, along $\overline{DE}$. Find $HD$ that will minimize $HM + HN$.



2/3 mile     1 1/4 mile

3 miles

$DE = 3\ miles$

Hints
- Draw a <u>new</u> sketch
- Use techique from class (read through answer method)
- $\sim$