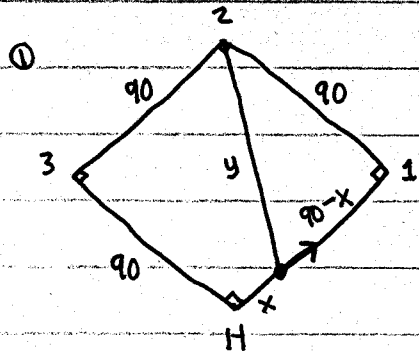


Show all work on this sheet, including mental steps, in a clearly organized way that speaks for itself. Use proper mathematical notation. Box short final answers.



A baseball diamond is a square with side 90 ft.

A batter hits the ball and runs towards first base with a speed of 24 ft/s. (title IX intervention)

At what rate is ~~her~~ distance from second base decreasing when she is halfway to first base?

Answer with a complete English sentence restating the question as a statement. [You have a headstart with the setup.]

- ② Suppose oil spills from a ruptured tanker and spreads in a circular pattern. If the radius of the oil spill increases at a constant rate of 1 m/s, how fast is the area of the spill increasing when the radius is 30 m?