Name: $\qquad$
Date: $\qquad$

## Lost in Minecraft

Imagine you have built a base in Minecraft. You wander away from your base, and realize you have no idea which direction to head in order to get back to your base. You do know that your base is about 1000 blocks away, and that you can see your base if you get within 500 blocks of it. You also have a friend in this world, who is standing next to you.

On the middle of a piece of paper, draw an X to mark your current position in your Minecraft world. If you and your friend head off in opposite directions and walk 1000 blocks, how likely are you to find your base?

Show your work, and write your answer in a complete sentence.

