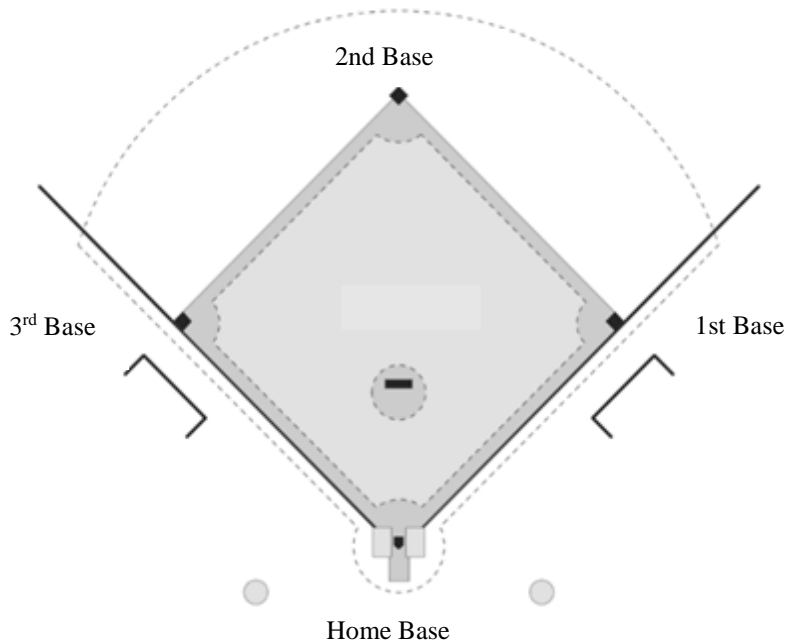


Take Me Out to the Ball Game

The four bases of a major league baseball field form a square which is 90 feet on each side. A drawing of the field is overlaid on a coordinate grid.

- The pitching mound is collinear to home plate and second base.
- The pitching mound is not equidistant from each base.
- The pitching mound is 60.5 feet from home plate.



To which base is the pitcher closest?

Mathematically justify your answer and provide a labeled diagram which models the problem and shows all variables to which you will refer.