

B12 (Team)
Steering Kinematics Derivations
Due February 18, 2010

Now that you have derived a formula for the vertical displacement of the center of the front wheel relative to that of the steering angle, calculate the effect on your bicycle on steering head lowering for two different steering angles that you pick (each team member should be using different angles). Use MatLab to do your calculating. (Use the formulas provided in the previous assignment.)

Do the calculation for both $d = 0$ and for the actual offset d of your bicycle.

How do your calculations compare with the actual lowering of the steering head (measure it)?

Be sure use LaTeX to write up your solutions.

Hand in the .pdf version of your solution. Hand in your .m file.