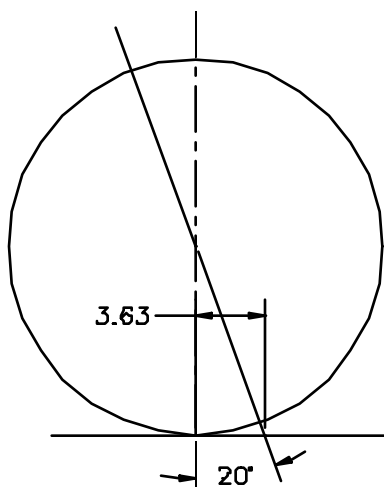


You can always lay a bubble protractor on the fork. That is a perfectly good way to measure the head angle. An easier and better way to measure the angle is as shown in the drawing. Lay a ruler vertically on the jig so that you get the two measurements shown here as X and Y. Divide X by Y then hit the inverse function and tangent buttons on your calculator. Twenty degrees is the target. This recumbent bicycle requires a twenty degree angle for a number of reasons including the placing of the handlebar, rider comfort and the much written about steering attribute known as trail.



Trail

So many generalizations have been made, axioms dictated and proverbs accepted about bicycle steering that it would take reams of documentation to rebut all the arguments made for and against various steering layouts. So what is trail? Look down the barrel of your fork at a spot on the ground. The distance this spot is forward of the tire contact patch is trail. Two of the designers at Robobike built a tandem bicycle that had a head tube whose angle could be varied from zero to thirty degrees. With the 27" diameter wheel and straight forks, the trail varied between zero and nearly 8 inches. At the extremes, control became difficult during some maneuvers but taken all together, the captain of this tandem had no problems adapting to all conditions and configurations. Oversteering tendencies become incredibly high and recovery from tight turns is scary at trail values over 6 inches.