

My friend is a member in good standing of a small but enthusiastic professional group: the brotherhood of compulsive barbers; or, as they are sometimes called, the B.A.R.B. The group is gathering to celebrate the 10th anniversary of their founding. The hall will be decorated with, among other things, large barber poles each of which is 6m high and 1m in diameter. B.A.R.B has hired a company to construct these poles, but a problem has arisen. B.A.R.B asked the company to paint the red stripe on in such a way that the center of it circles the pole uniformly a total of precisely 3 times (they are compulsive, after all). So far, all of the company's attempts have failed to satisfy the barbers, and the anniversary is just around the corner. Can you help? The question they need you to answer is this: what angle should the middle of the red stripe make with the bottom of the pole so that the barbers will be satisfied?

If you are the first to submit the correct answer, you will be rewarded with a meal at the Emory Deli far more delicious than the rubbery banquet chicken which will be served at the B.A.R.B 10th anniversary celebration.