

TRACK DESIGN SOLUTION by Rajeev

The radius of the curved section is  $73.2484/2 = 36.6242$ . You get this answer by taking away 85 twice from 400M so the answer is 230M. 230M is the circumference of the two semicircles and so working out the radius of the two circles, you do 230M divided by  $\pi = 3.14$  and so you get the diameter of 73.2484M. The radius is half of that and so the radius is 36.6242M

LENGTH OF INSIDE EDGE	AVERAGE LENGTH OF INSIDE LANE	RADIUS	STAGGER DISTANCE IN A 200 M RACE	STAGGER DISTANCE IN A 400 M RACE
400	403.925	36.6242	0 DISTANCE FROM STARTING LINE	0 DISTANCE FROM STARTING LINE
407.85	411.775	37.8742	3.925 FROM STARTING LINE	7.85M FROM STARTING LINE
415.70	419.625	39.1242	7.85 FROM STARTING LINE	15.7M FROM STARTING LINE
423.55	427.475	40.3742	11.775 FROM STARTING LINE	23.55M FROM STARTING LINE
431.40	435.325	41.6242	15.625 FROM STARTING LINE	31.4M FROM STARTING LINE
439.25	443.175	42.8742	19.475 FROM STARTING LINE	39.25M FROM STARTING LINE
447.10	451.025	44.1242	23.325 FROM STARTING LINE	47.1M FROM STARTING LINE
454.95	458.875	45.3742	27.175 FROM STARTING LINE	54.95M FROM STARTING LINE
462.8	466.725	46.6242	31.025 FROM STARTING LINE	62.8M FROM STARTING LINE