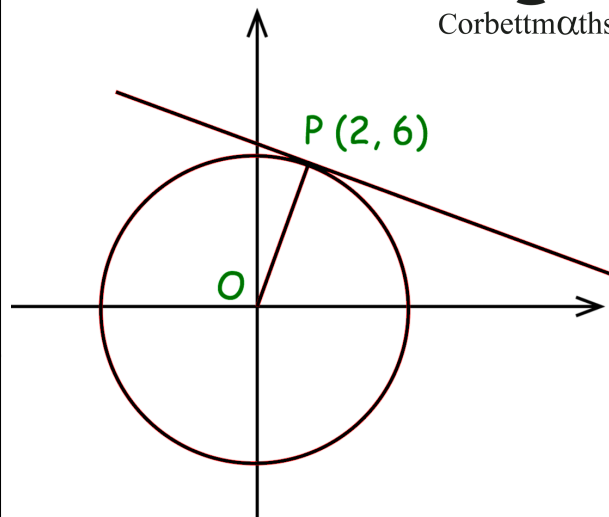




The diagram shows the circle $x^2 + y^2 = 40$ with a tangent at the point (2, 6)

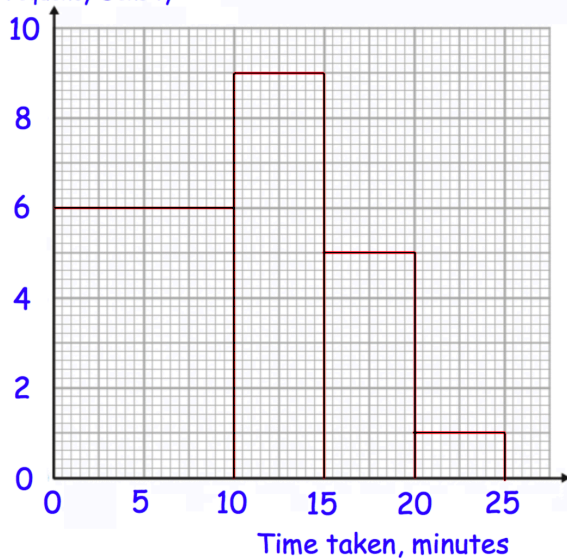
Find the gradient of the line OP



Find the gradient of the tangent

Find the equation of the tangent

Frequency Density



The histogram shows the time taken to travel to school by 135 students.

Two students are chosen at random.

Work out an estimate to the probability that both students take more than 5 minutes to travel to school.

Prove that if two consecutive integers are squared, that the sum always gives a remainder of 1 when divided by 4.