


26th Dec	
Evaluate $16^{-\frac{3}{4}}$	 Corbettm0ths
$\int 8x^3 + \sqrt{x} \, dx$	
A curve is such that $\frac{dy}{dx} = \frac{4}{x^3} + 1$ and the point (2, 8) lies on the curve. Find the equation of the curve	
A shipyard builds ships over 50 years, starting in year 1961 (year 1) and finished in year 2010 (year 50) The number of ships built each year forms an arithmetic sequence with first term 1220 and common difference -15.	Find the total number of ships built at the shipyard.
The quadratic equation $(2k - 1)x^2 + (k + 3)x + k = 0$ has no real roots. Find the possible values of k.	