Class 5: Series solution of Bessel Differential Equation, Bessel function:

1. Prove that $J_n(-x)=(-1)^n J_n(x)$ when 'n' is a real number integer.
2. Compute $J_0(2)$ and $J_1(2)$ correct to 3 decimal places. Ans: 0.224, 0.44
3. Show that $J_{\frac{1}{2}}(x)=\sqrt{\frac{2}{\pi x}}\sin x$

****