Tough Nut to Crack – Integration

To be submitted by midday Wednesday 24th February 2016.

The prize will be a book to be decided.

Show that $\int \sqrt{a^2 - x^2}\,\mathrm{d}x = \frac{x}{2}\sqrt{a^2 - x^2} + \frac{a^2}{2}\sin^{-1}\left(\frac{x}{a}\right)$

The solution needs to be word processed and emailed to me at k.singh@herts.ac.uk

The prize will go to the student who produces not only the correct result but also the best written answer.