

## MA182 Computer Algebra Assignment

Use the Computer Algebra system of your choice to find the following integrals. I would suggest either learning Matlab (available in the Math/Science center), using <http://integrals.wolfram.com> (an online version of the integration feature in Mathematica), or <http://www.wolframalpha.com/>.

1.  $\int x^2(1+x^3)^4 dx$

a. Now, do this integral by hand and compare your answers

2.  $\int x^5\sqrt{x^2+1} dx$

3.  $\int x\sqrt{x^2+2x+6} dx$

4.  $\int e^t \sin(at) dt$

5.  $\int \tan^2(x)\sec^4(x) dx$

6.  $\int \sin(x^2) dx$