

## Worksheet 7.5 – Strategy for Integration (LT: 1a-1h)

1)  $\int x \sin^2 x dx$

2)  $\int x 4^x dx$

3)  $\int x \sin^{-1} x dx$

4)  $\int \ln(9x^2 - 1) dx$

5)  $\int \frac{\sqrt{9+x^2}}{x} dx$

6)  $\int \frac{\sqrt{1-9x^2}}{x} dx$

7)  $\int \frac{1}{x\sqrt{9x^2-1}} dx$

8)  $\int \frac{x}{\sqrt{9x^2-1}} dx$

9)  $\int \frac{1}{x\sqrt{9x-1}} dx$

10)  $\int \frac{1}{x^2(x^2+1)} dx$

11)  $\int \frac{1}{x^2(x^2-1)} dx$

12)  $\int \tan^5 x \sec^4 x dx$

13)  $\int_0^{\frac{\pi}{2}} \cos^3 x \sin 2x dx$

14)  $\int \frac{dx}{\sqrt{e^x-1}}$