Student Name: _____ **Score:**

Basic Integration

Sheet 1

Integrate the following w.r.t. x

$\int \sin 2x\, dx$

$\int 3\sin 5x\, dx$

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

$\int \sin^2 x\, dx$

$\int 4e^{8x} dx$

$\int 7e^{3x} dx$

$\int \frac{6\sin 3x}{\tan 3x} dx$

$\int 6e^{3x+5} dx$

$\int 3\sqrt{e^{3x}} dx$

$\int \sin 4x\, dx$

$\int 7\cos 6x\, dx$

$\int 3\cos 6x\, dx$

Student Name: _____ **Score:**

Answer key

Basic Integration

Sheet 1

$-\frac{\cos 2x}{2} + C$

$-\frac{3\cos 5x}{5} + C$

$\frac{(3x+4)^3}{9} + C$

$\frac{x}{2} - \frac{\sin 2x}{4} + C$

$\frac{e^{8x}}{2} + C$

$\frac{7e^{3x}}{3} + C$

$2\sin 3x + C$

$2e^{3x+5} + C$

$2\sqrt{e^{3x}} + C$

$-\frac{\cos 4x}{4} + C$

$\frac{7\sin 6x}{6} + C$

$\frac{\sin 6x}{2} + C$