

Section 2: Differentiating trigonometric functions

Exercise level 1

1. Differentiate:

(i) $\sin 4x$

(ii) $\cos 3x$

(iii) $\tan 2x$

2. Differentiate:

(i) $x^2 \sin x$

(ii) $\frac{\cos x}{1+x}$

(iii) $\sin(1+x^2)$

(iv) $\sin^2 x$

(v) $\cos^3 4x$

(vi) $e^{\tan x}$

(vii) $\ln(\cos x)$

(viii) $e^{2x} \sin x$

3. Differentiate $\cos x^\circ$.