

HL Math 1: Open Notes Quiz

December 5

Show all work on your paper. You may consult your class notes or past problems you have worked for reference. Turn your work in to your sub.

Factor & simplify all answers as much as possible.

[1] Find $\frac{dy}{dx}$: $y = (3x+2)^2 \cdot (2x-3)^4$

[2] Find $\frac{dy}{dx}$: $y = \frac{(4x^2-3)^3}{2x+1}$

[3] Find $\frac{dy}{dx}$: $y = x^3 \cdot \cos(x^2)$

[4] Find $\frac{dy}{dx}$: $y = \ln(\sec x + \tan x)$

[5] Find $\frac{dy}{dx}$: $y = \frac{\tan^{-1}(2x)}{2x}$

[6] Find $\frac{dy}{dx}$: $y = \frac{2^{\cos x}}{\sin x - \cos x}$