

differentiate trig

- [SQA] 1. Find the equation of the tangent to the curve $y = 2 \sin(x - \frac{\pi}{6})$ at the point where $x = \frac{\pi}{3}$. 4
- [SQA] 2. Differentiate $\sin 2x + \frac{2}{\sqrt{x}}$ with respect to x . 4
- [SQA] 3. Given $f(x) = \cos^2 x - \sin^2 x$, find $f'(x)$. 3
- [SQA] 4. Find $\frac{dy}{dx}$ given that $y = \sqrt{1 + \cos x}$. 3
- [SQA] 5. Given $f(x) = (\sin x + 1)^2$, find the exact value of $f'(\frac{\pi}{6})$. 3

[END OF QUESTIONS]