## <u> Trigonometry – 2021 A2 Nov P2</u>

(a)	2021/Paper_9709/21/No.7(a), (b) By first expanding $\cos(2\theta + \theta)$ , show that $\cos 3\theta \equiv 4\cos^3\theta - 3\cos\theta$ .	
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( <b>b</b> )	Find the exact value of $2\cos^3(\frac{5}{18}\pi) - \frac{3}{2}\cos(\frac{5}{18}\pi)$ .	

I)	Prove that $4\sin x \sin(x + \frac{1}{6}\pi) \equiv \sqrt{3} - \sqrt{3}\cos 2x + \sin 2x$ .	[3]
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## 2. Nov/2021/Paper\_9709/22/No.7(a) (a) Prove that $4 \sin x \sin(x + \frac{1}{6}\pi) \equiv \sqrt{3} - \sqrt{3} \cos 2x + \sin 2x$