

Solve Trigonometric Equations

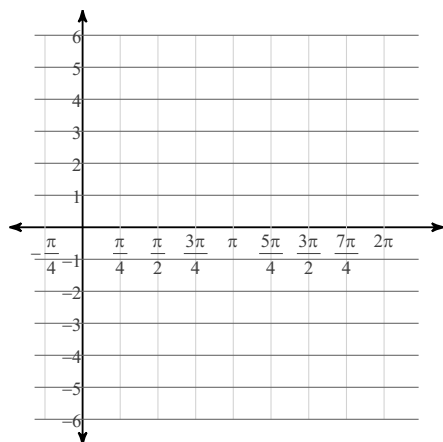
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Name _____

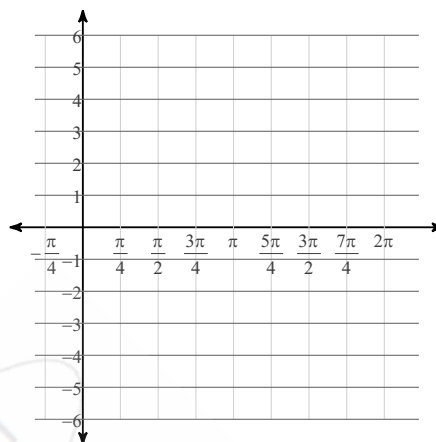
Date _____

Graph each function using radians. Solutions will be the x-intercepts.

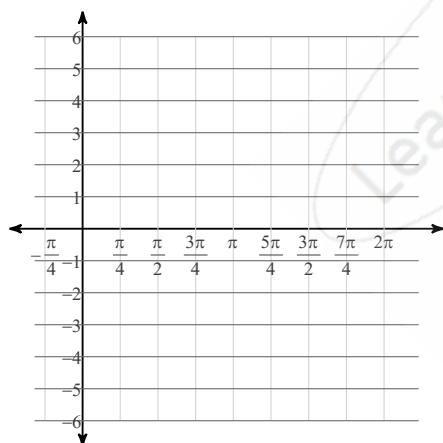
1) $y = 2\cos\left(4\theta + \frac{\pi}{6}\right)$



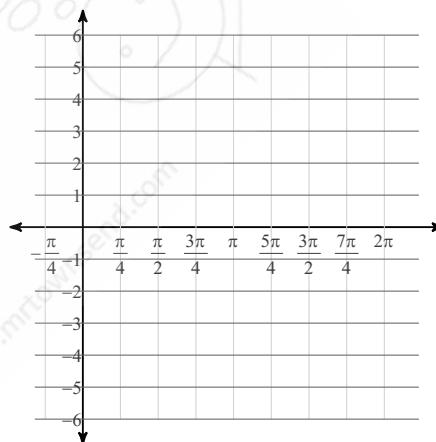
2) $y = \frac{1}{2} \cdot \cos 2\theta$



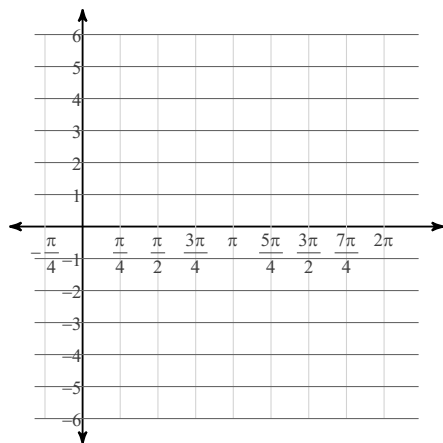
3) $y = 2\cos\left(4\theta + \frac{5\pi}{6}\right)$



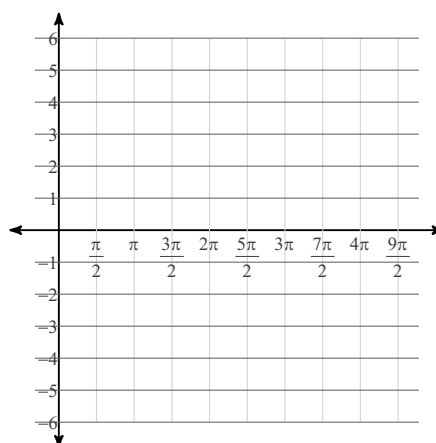
4) $y = 3\cot 2\theta$



5) $y = 4\sin 2\theta$

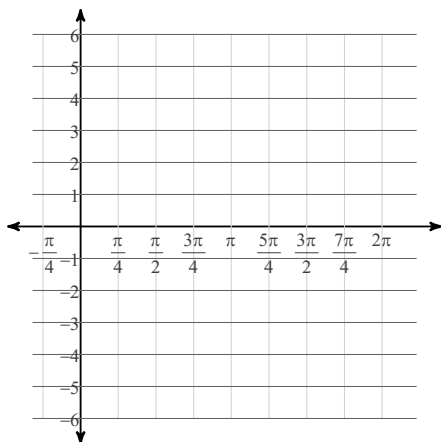


6) $y = 3\cot\left(\frac{\theta}{3} - \frac{\pi}{6}\right)$

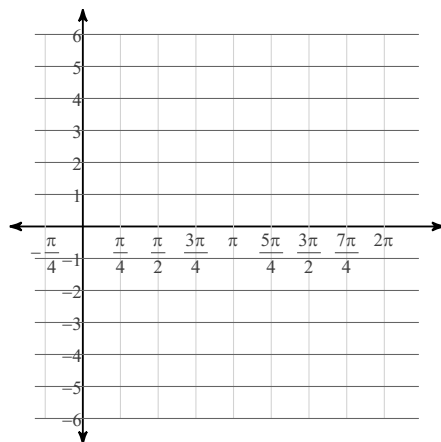


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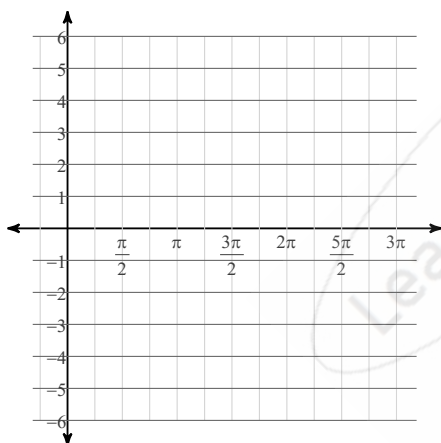
$$7) y = \frac{1}{2} \cdot \tan\left(2\theta - \frac{\pi}{6}\right)$$



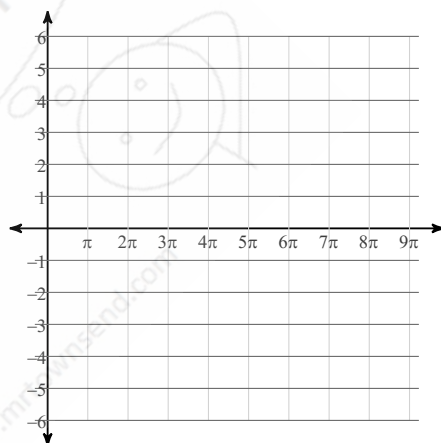
$$8) y = 2\sin\left(4\theta + \frac{5\pi}{6}\right)$$



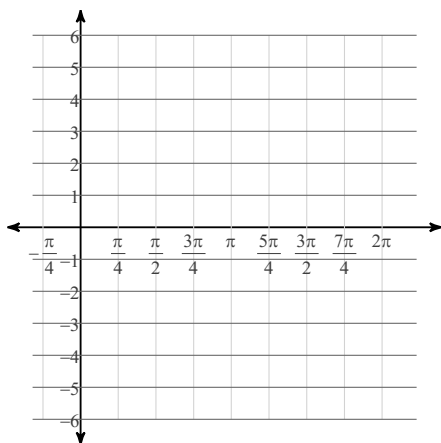
$$9) y = 4\cot\left(\frac{\theta}{2} - \frac{\pi}{3}\right)$$



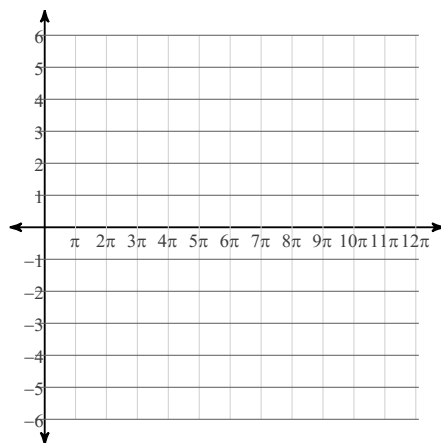
$$10) y = \frac{1}{2} \cdot \sin\left(\frac{\theta}{3} + \frac{\pi}{2}\right)$$



$$11) y = 2\cos\left(2\theta - \frac{\pi}{4}\right)$$

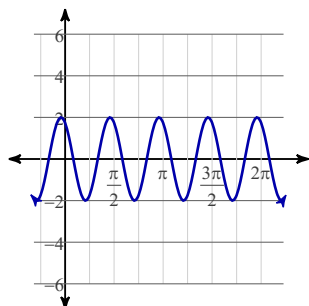


$$12) y = \frac{1}{2} \cdot \cos\left(\frac{\theta}{4} - \frac{3\pi}{2}\right)$$

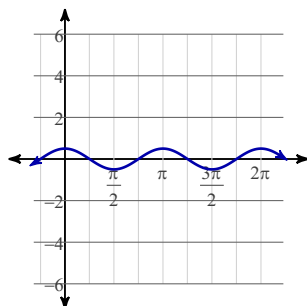


Answers to Solve Trigonometric Equations

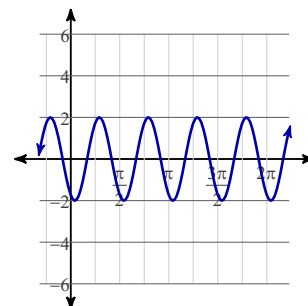
1)



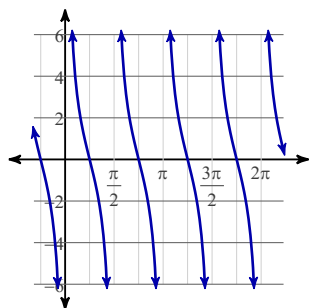
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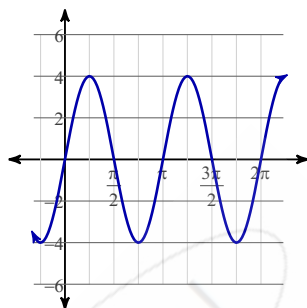
3)



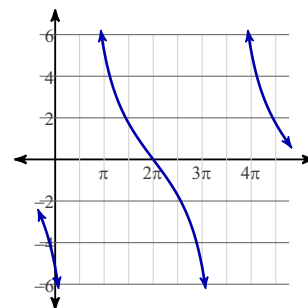
4)



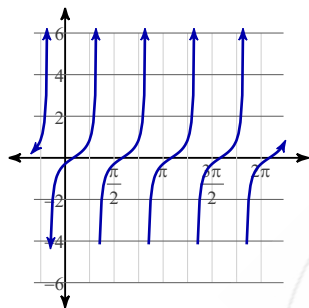
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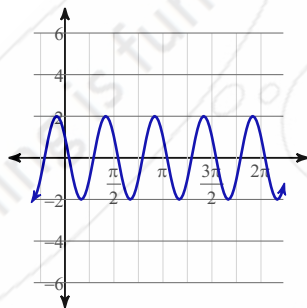
6)



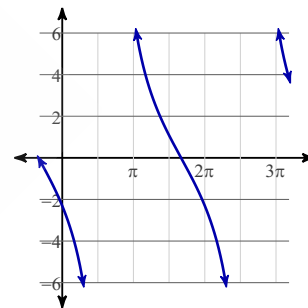
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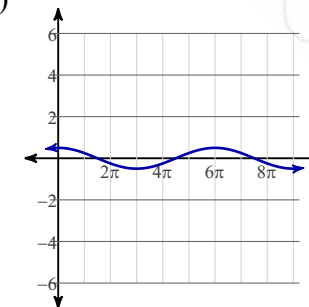
8)



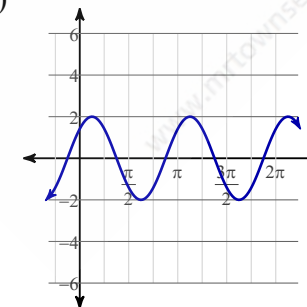
9)



10)



11)



12)

