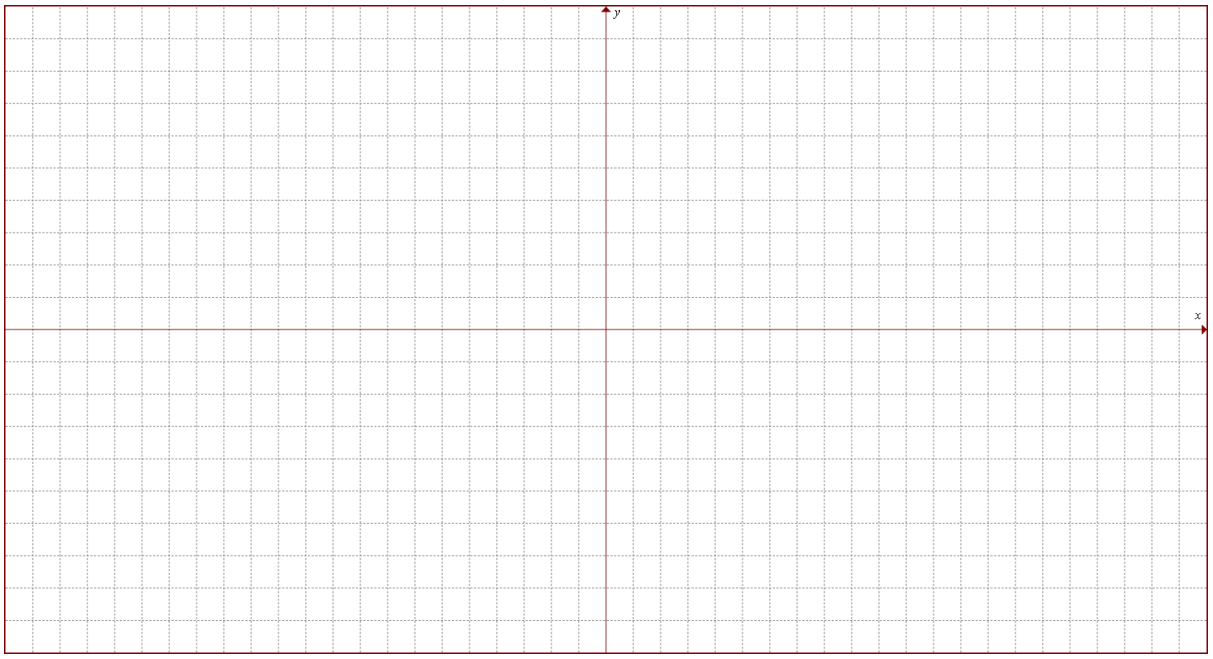
GRAPHING CIRCULAR FUNCTIONS

WORKSHEET 1

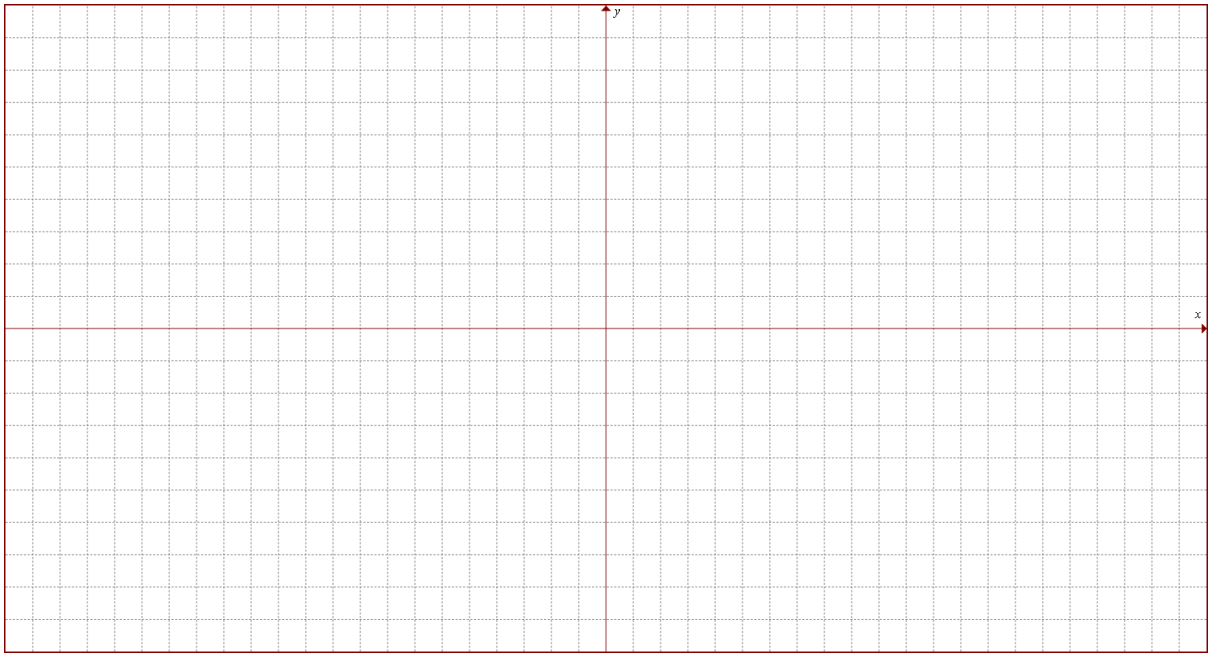
QUESTION 1

Sketch one complete cycle of the following functions.

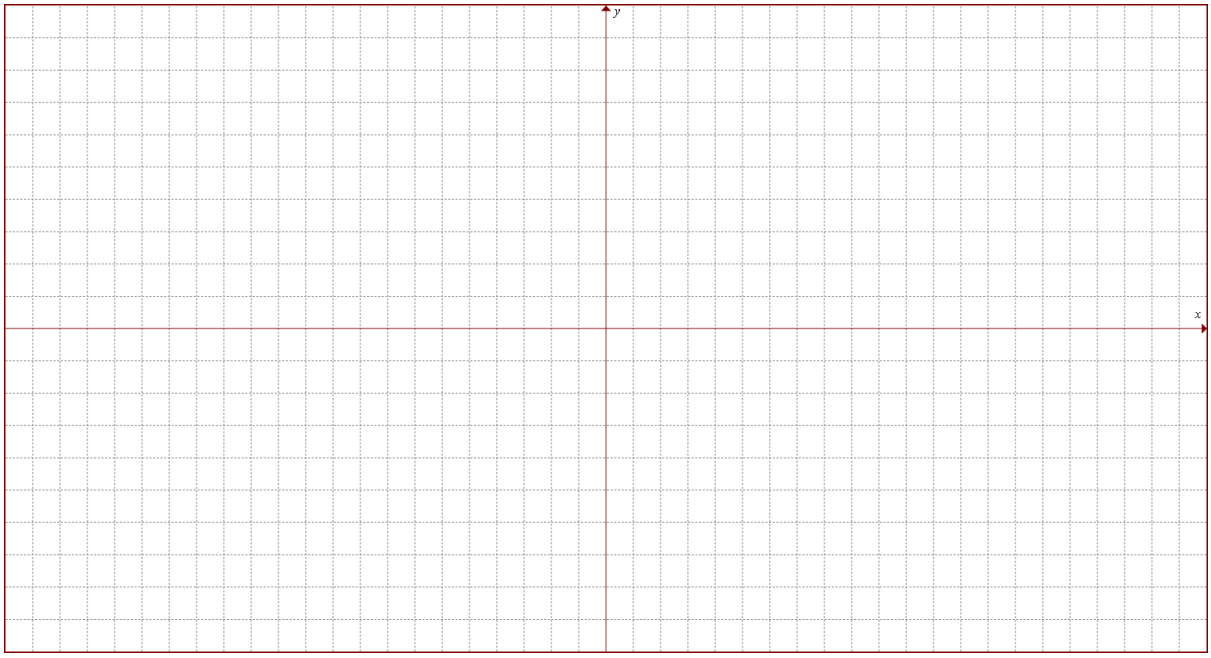
(a) $y = 4\sin\left(2\theta - \frac{\pi}{3}\right)$



(b) $y = -2\cos 3\left(\theta + \frac{\pi}{3}\right) - 1$

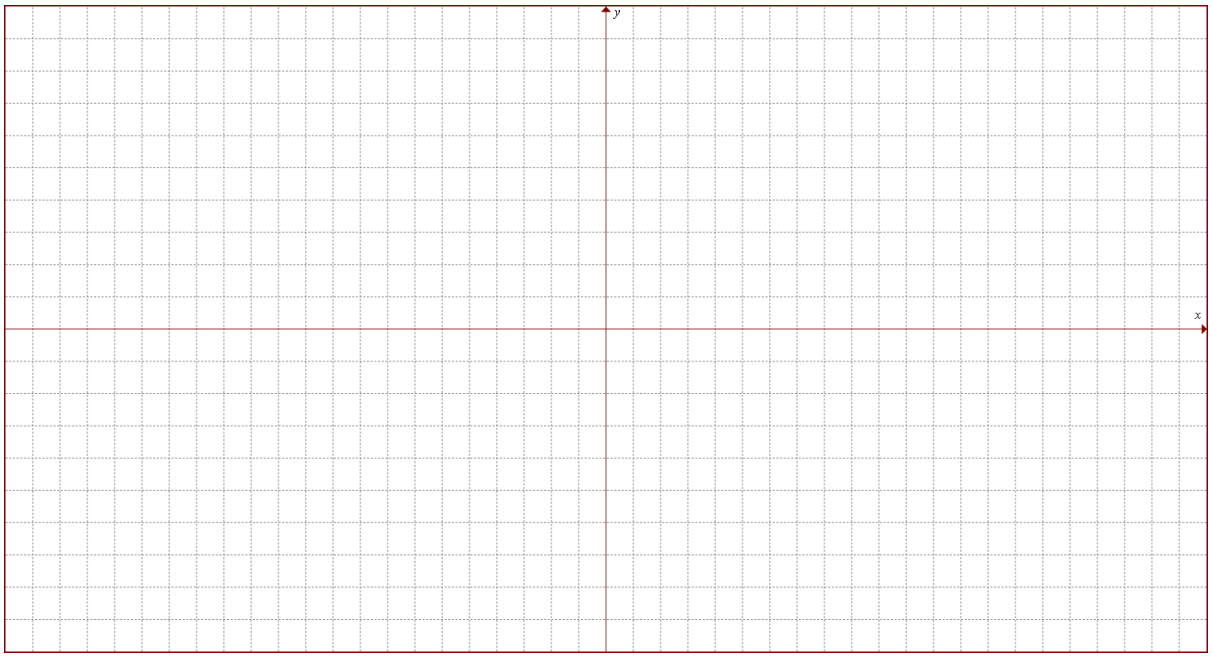


(c) $y = -5\tan\left(\frac{\pi}{6}\theta\right) + 8$

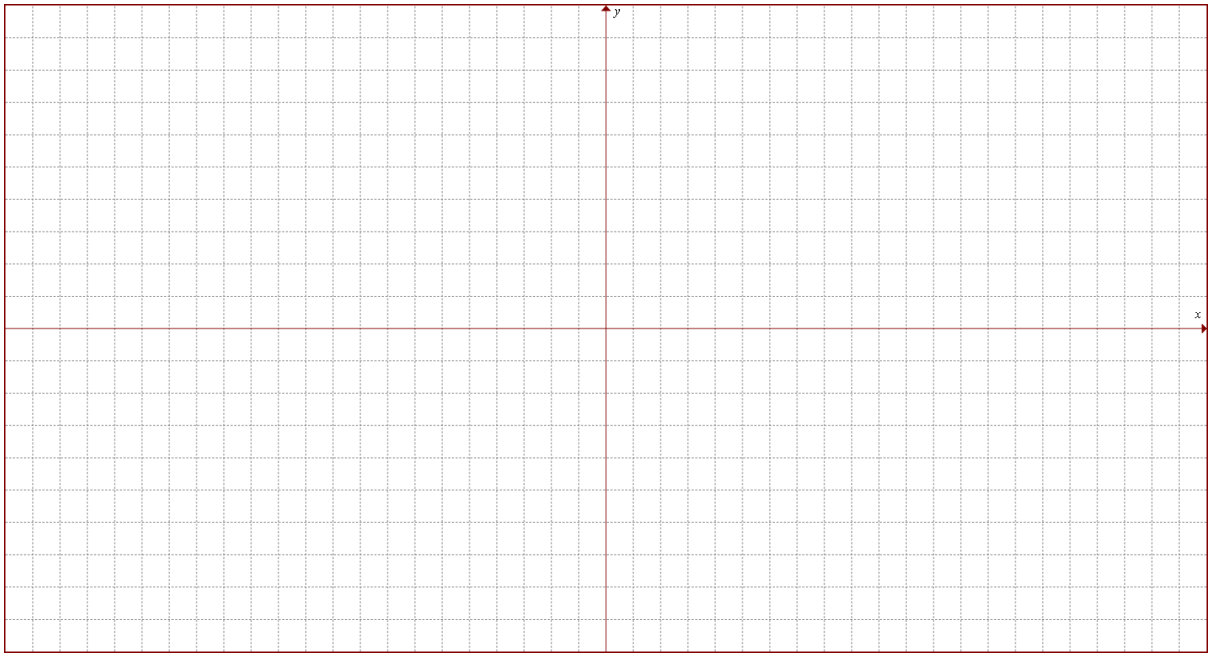


QUESTION 2
Sketch each equation over the given domain.

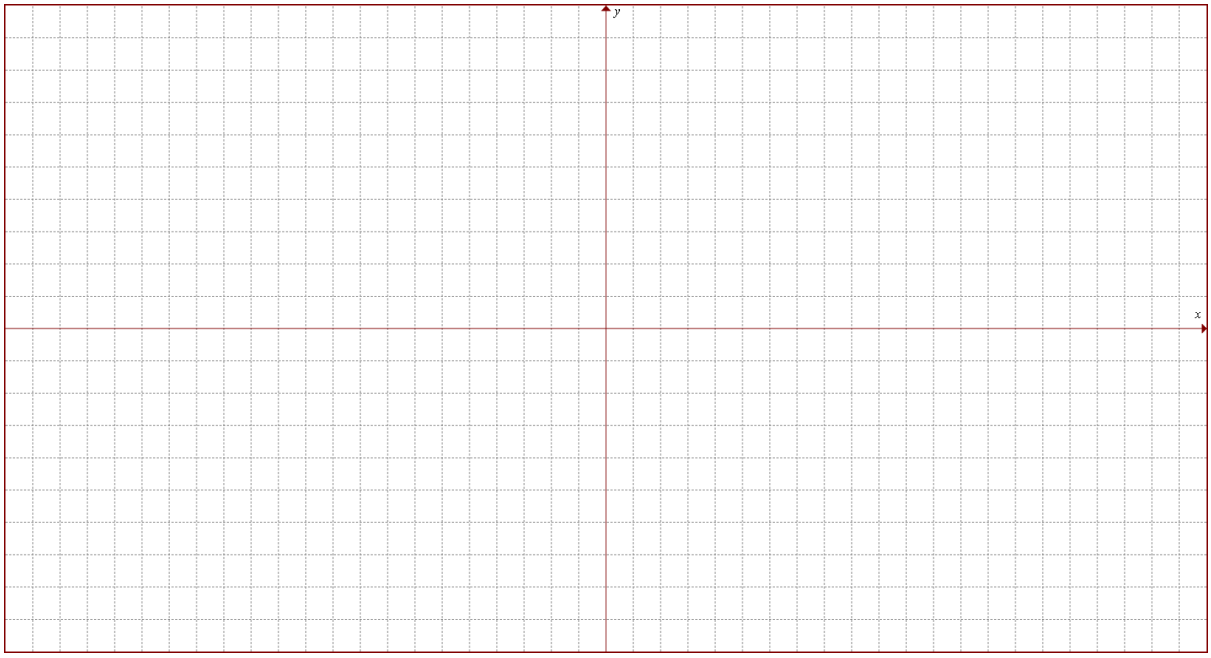
(a) $y = 2\cos\left(3x + \pi\right), \left[-\frac{2\pi}{3}, \frac{2\pi}{3}\right]$



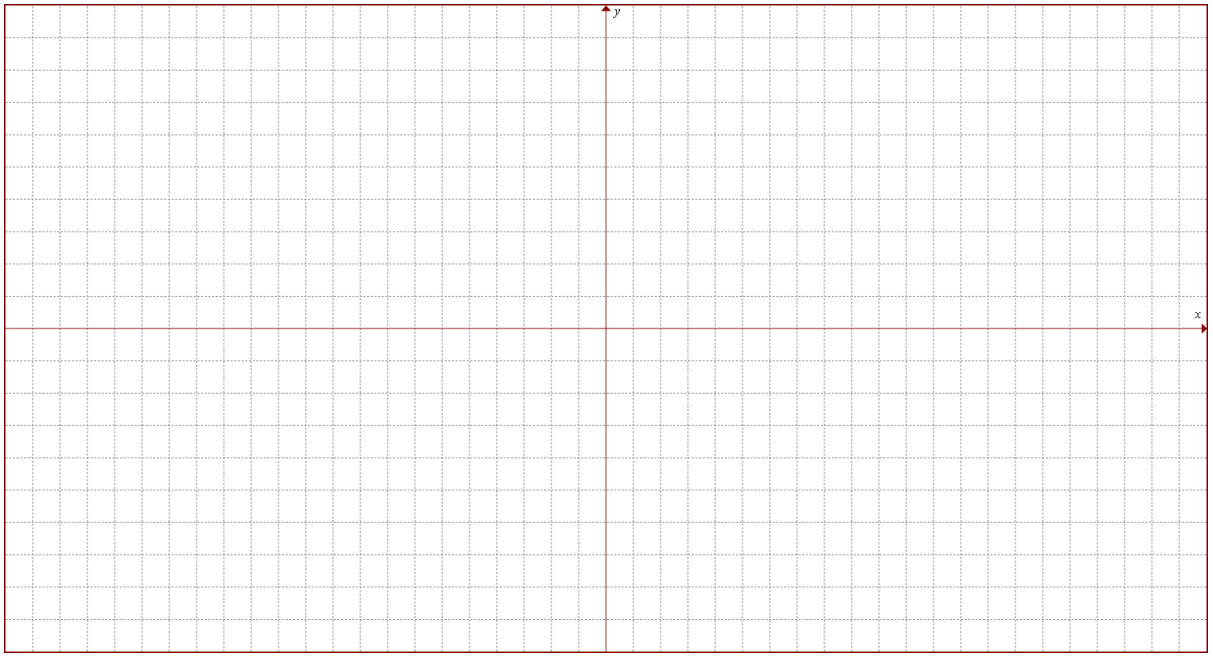
(b) $y = 3\sin 4\left(\theta + \frac{\pi}{2}\right) - 1,\ [0, \pi]$



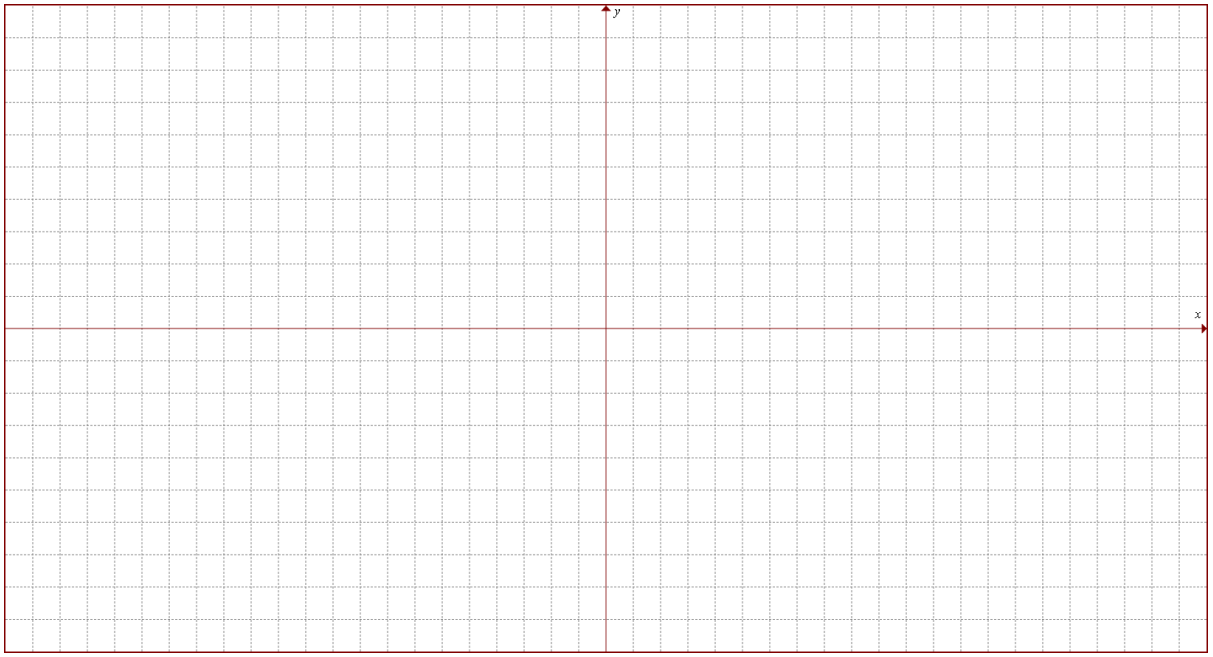
(c) $y = 2\tan 3\left(\theta + \frac{\pi}{3}\right) + 2\,,\ \left[-\frac{\pi}{2}, \frac{\pi}{2}\right]$



(d) $y = -3\sin 4\left(\theta - \frac{3\pi}{8}\right) - 2\,,\ [-\pi, \pi]$



(e) $y = 2\cos\left[3\left(\theta + \frac{\pi}{6}\right)\right] + 2$, $\left[-\frac{\pi}{2}, \pi\right]$



ANSWERS

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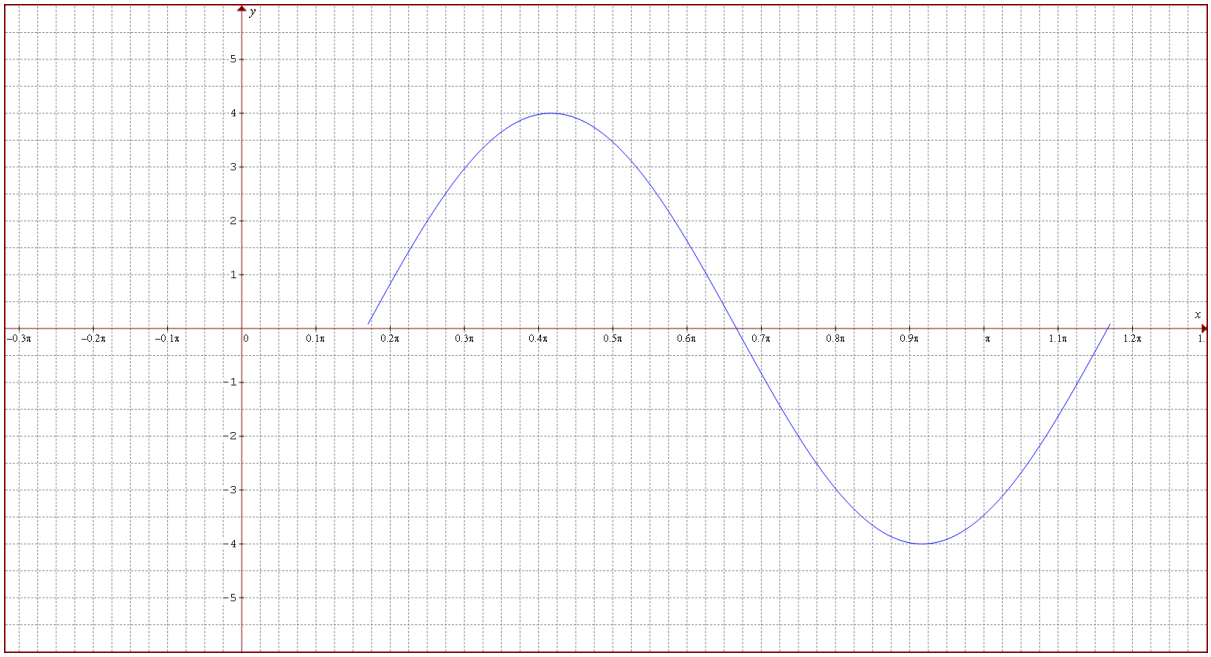

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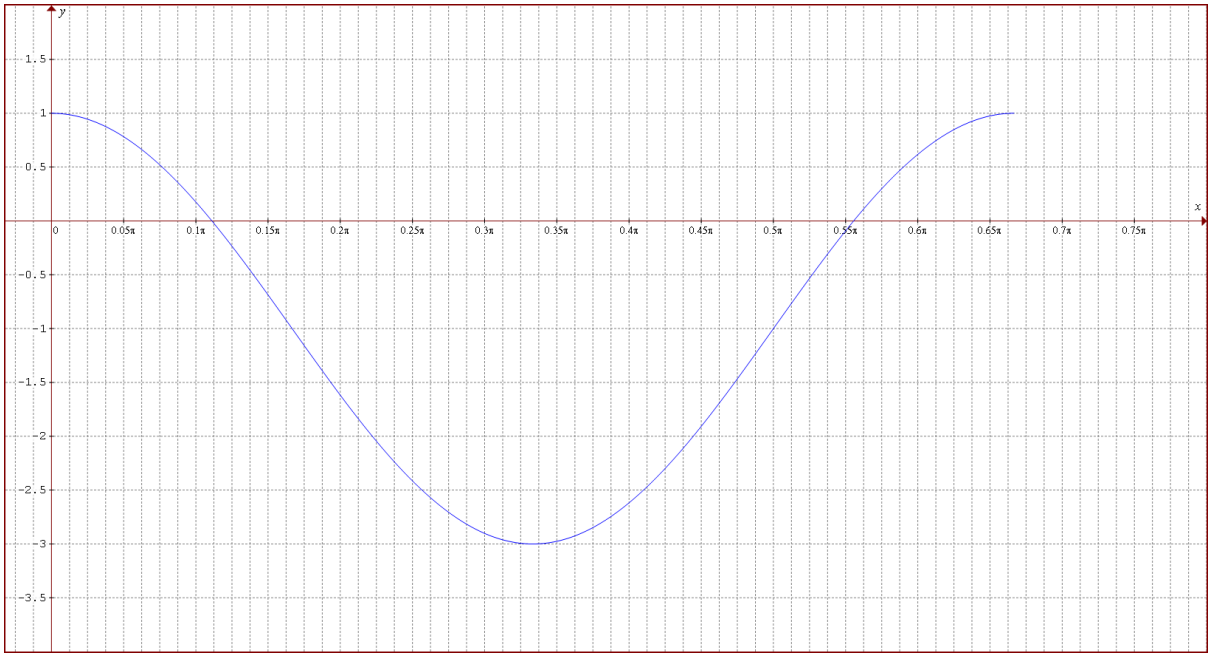

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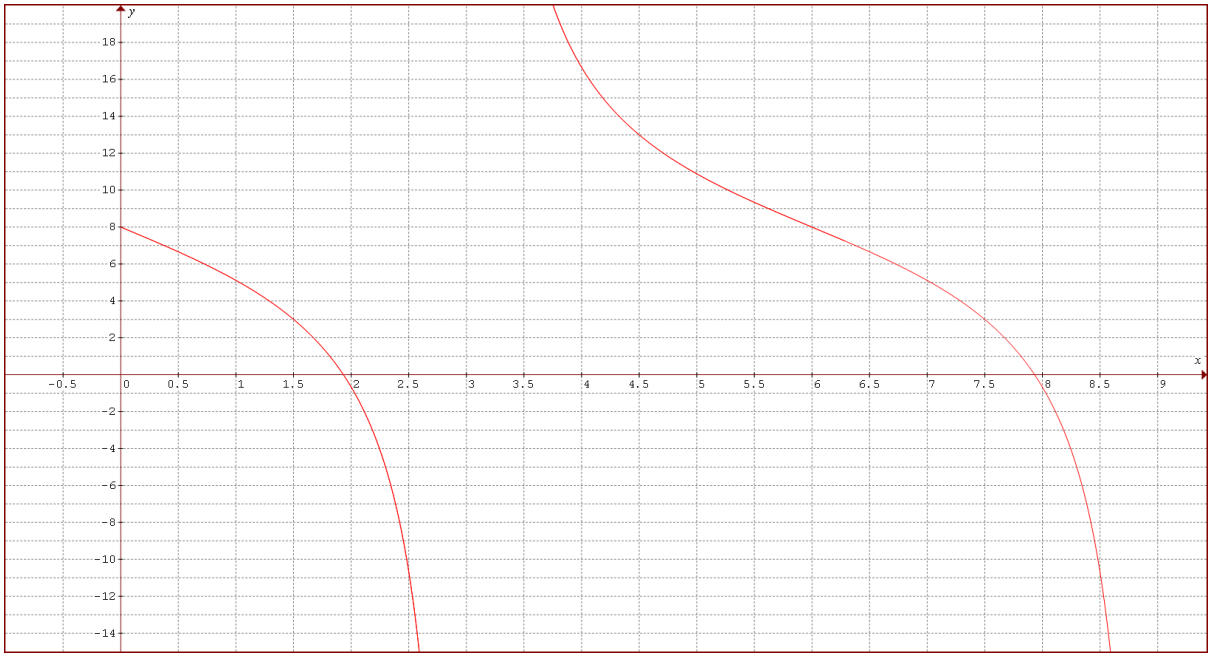

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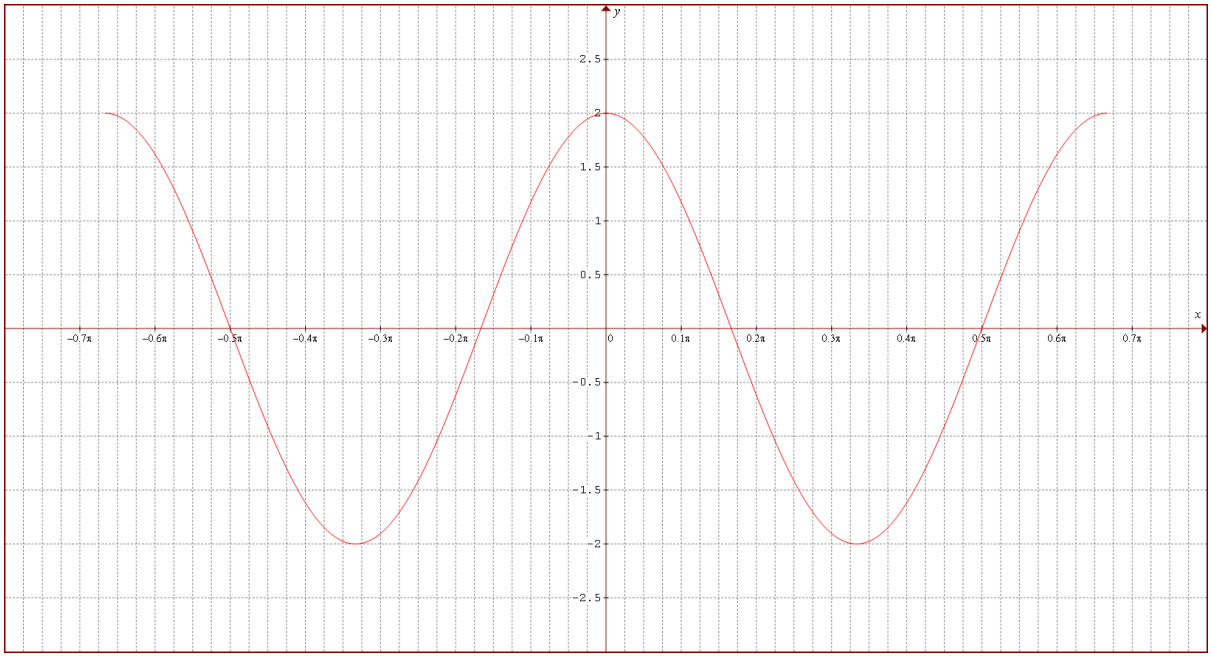

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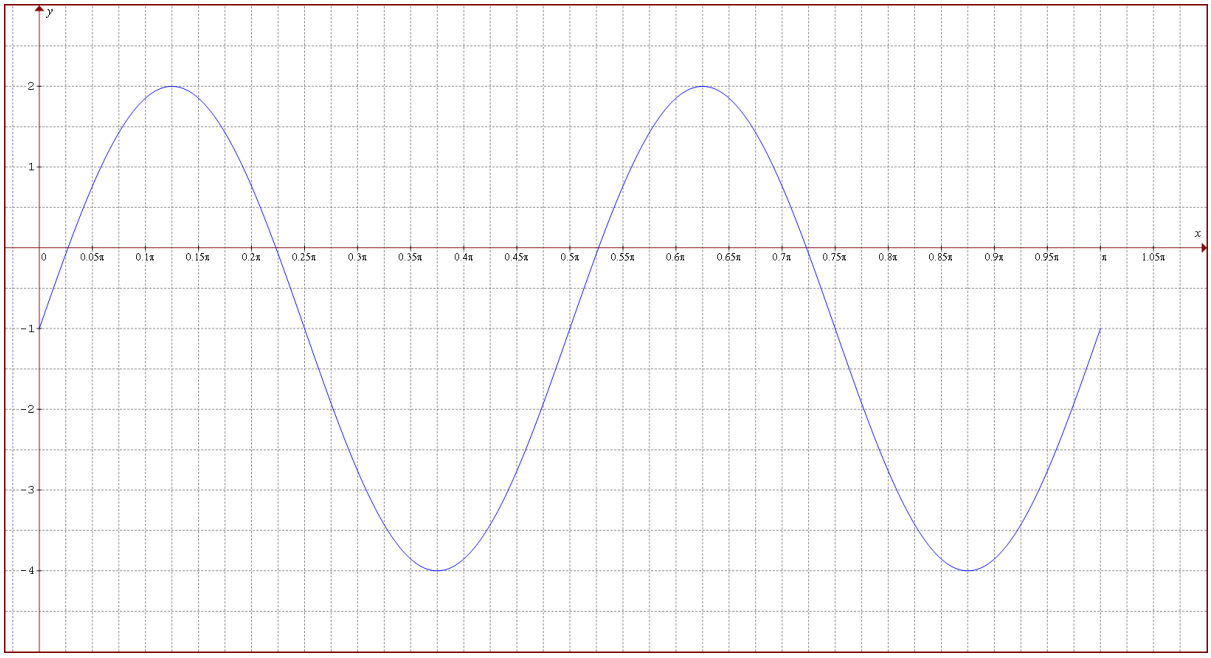

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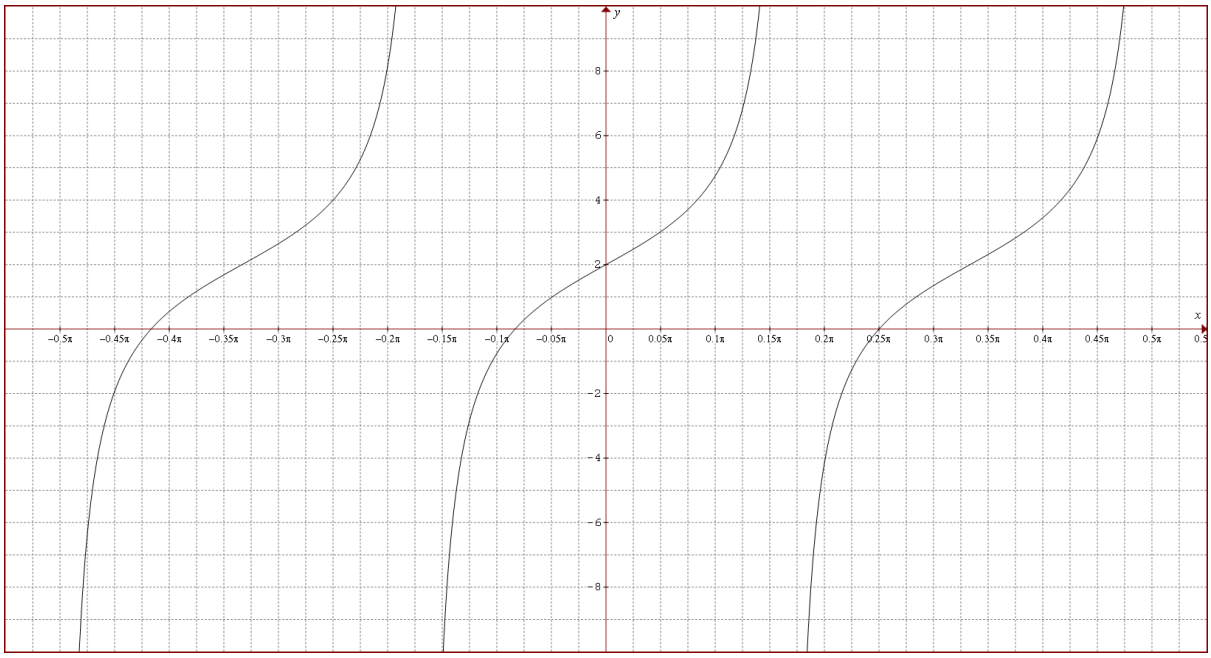

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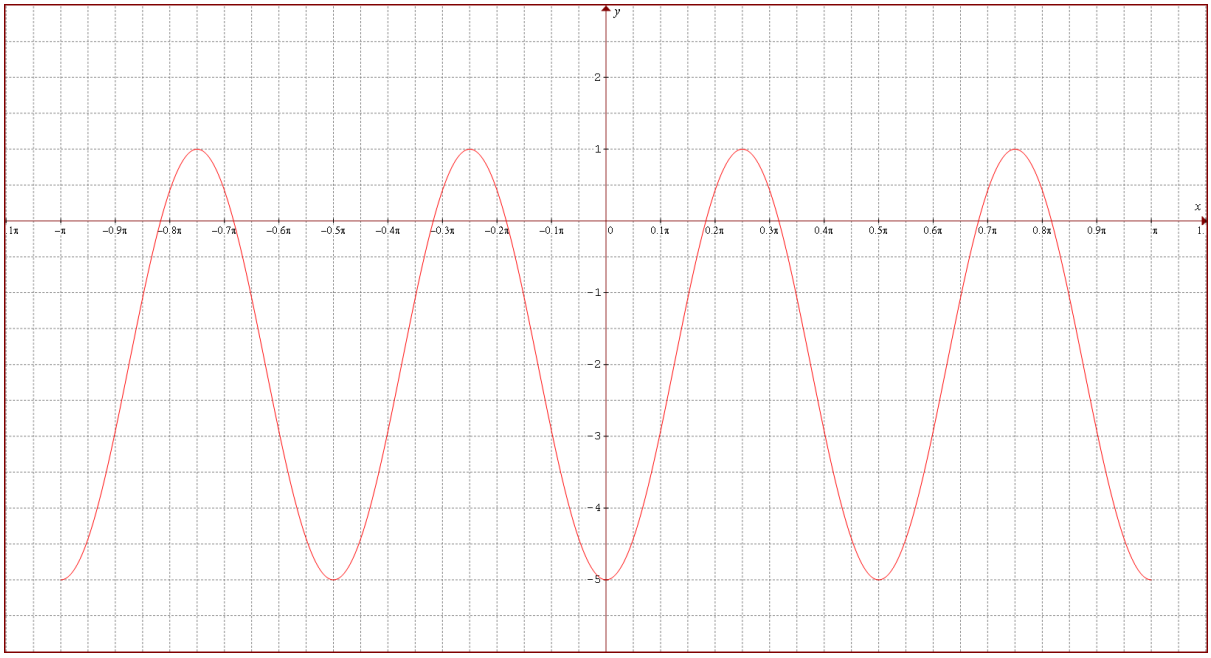

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