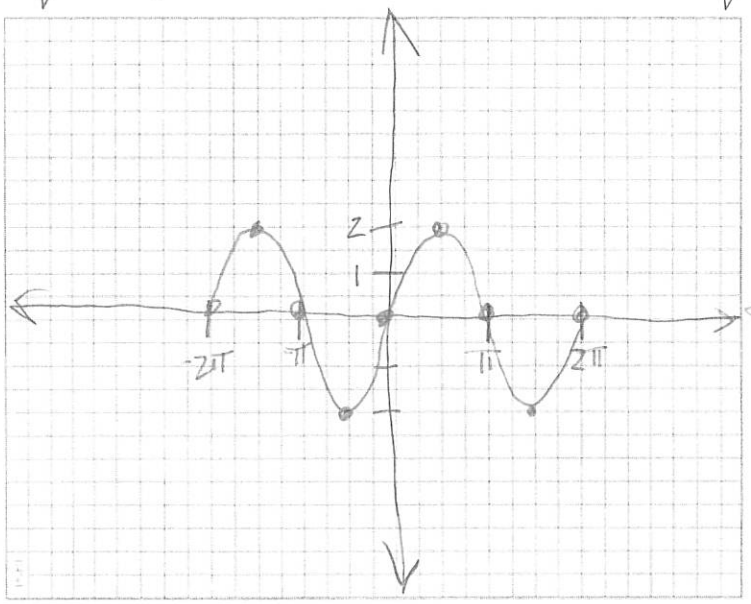
Graphing Practice | Ad majorem Dei gloriam | Accelerated Algebra 2 / Precalculus
Mr. Reis

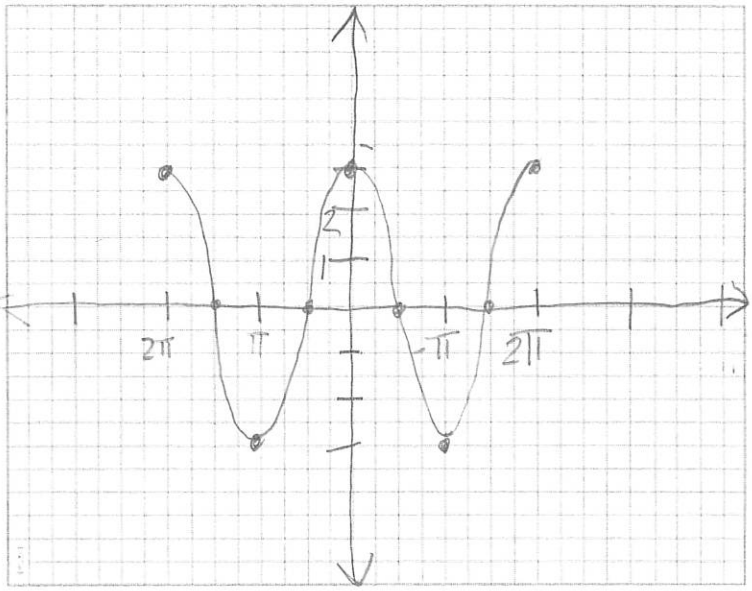
Name KEY

Graph each of the following functions, showing at least two cycles.

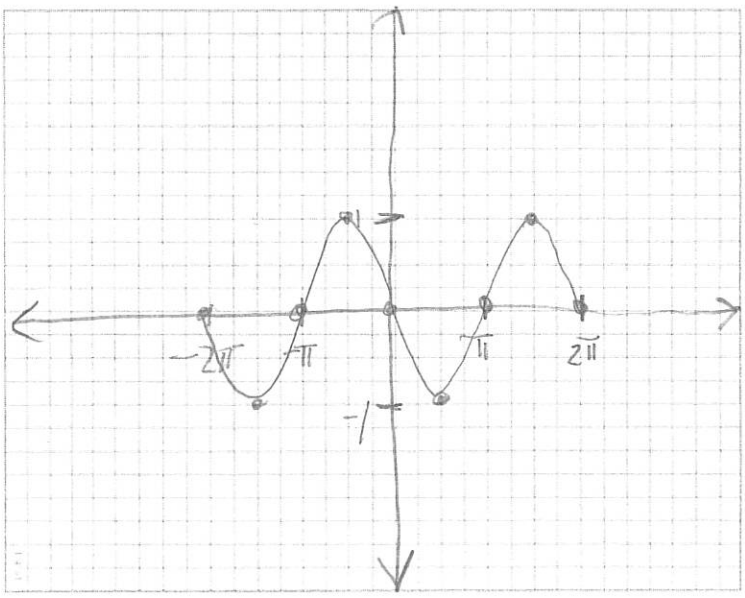
1. $y=2\sin x$



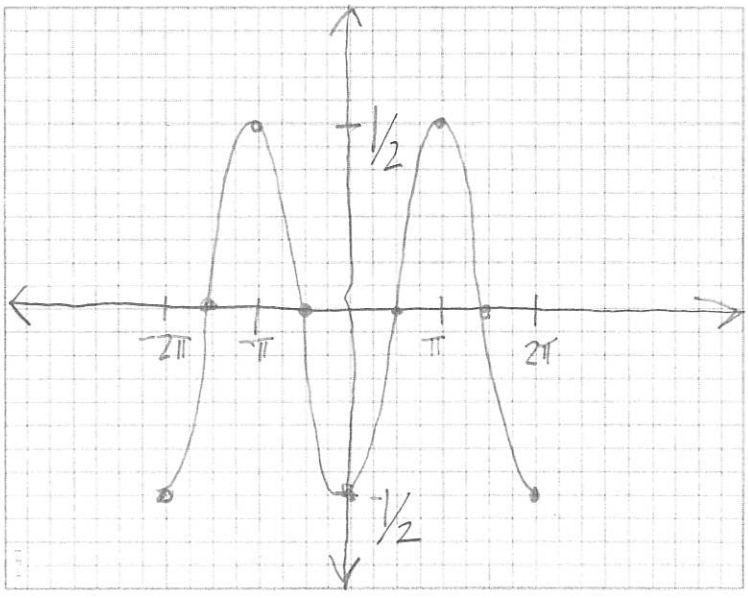
2. $y=3\cos x$



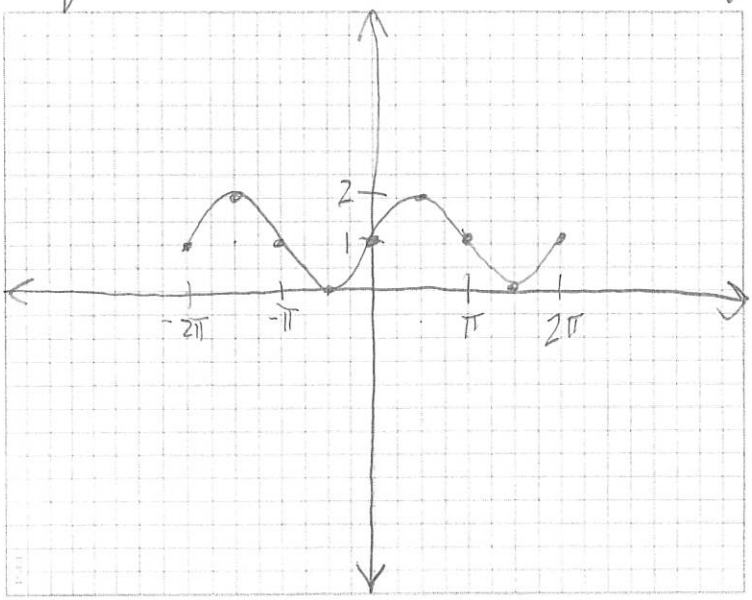
3. $y=-\sin x$



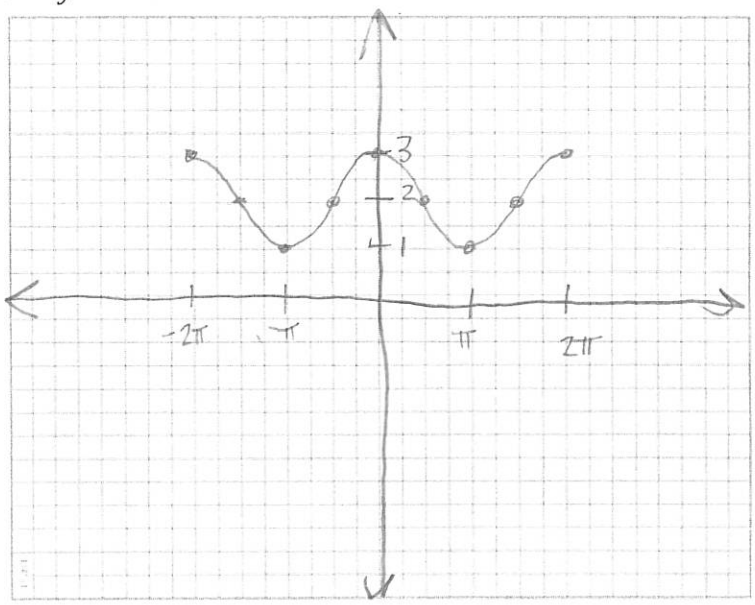
4. $y=-\frac{1}{2}\cos x$



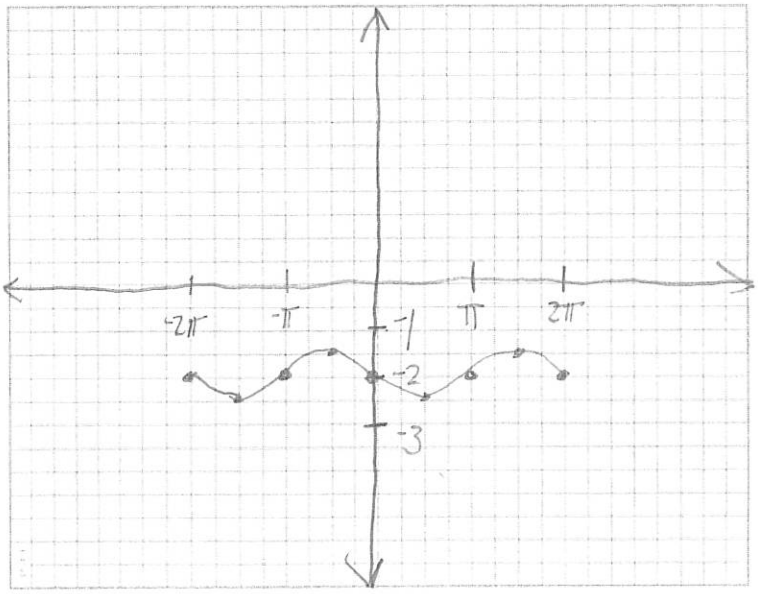
5. $y = \sin x + 1$



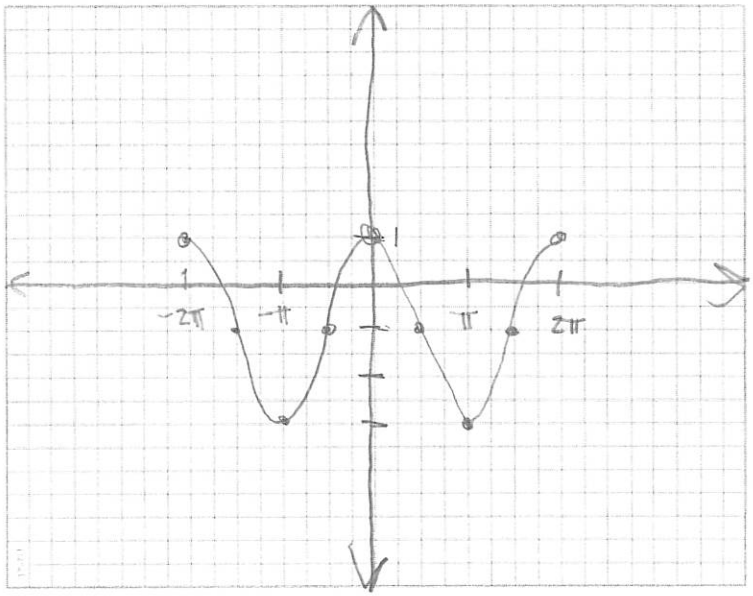
6. $y = \cos x + 2$



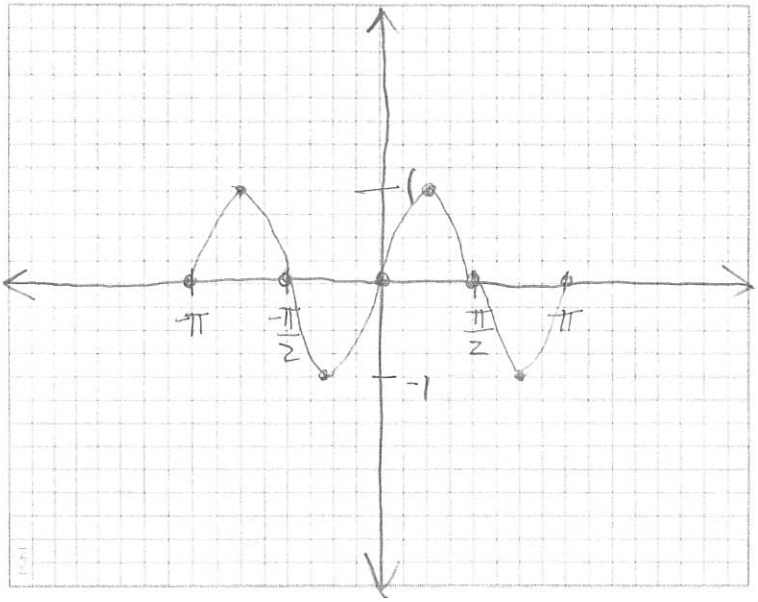
7. $y = -\frac{1}{2}\sin x - 2$



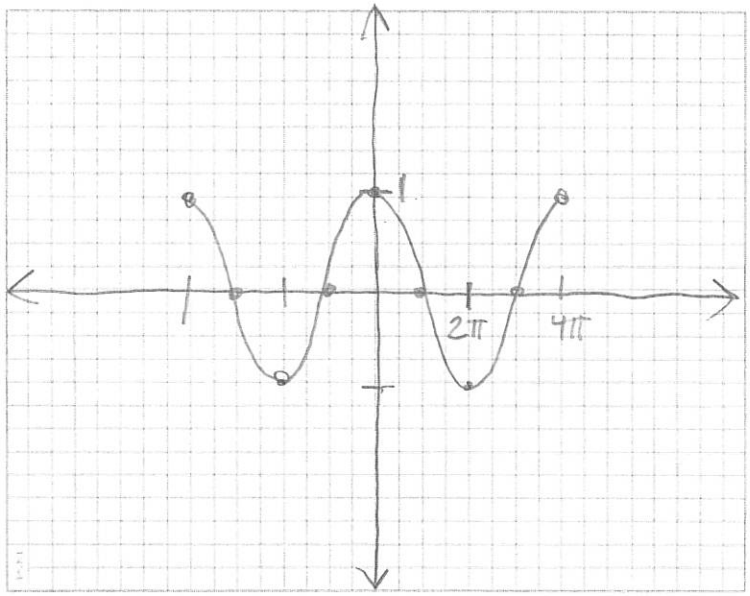
8. $y = 2\cos x - 1$



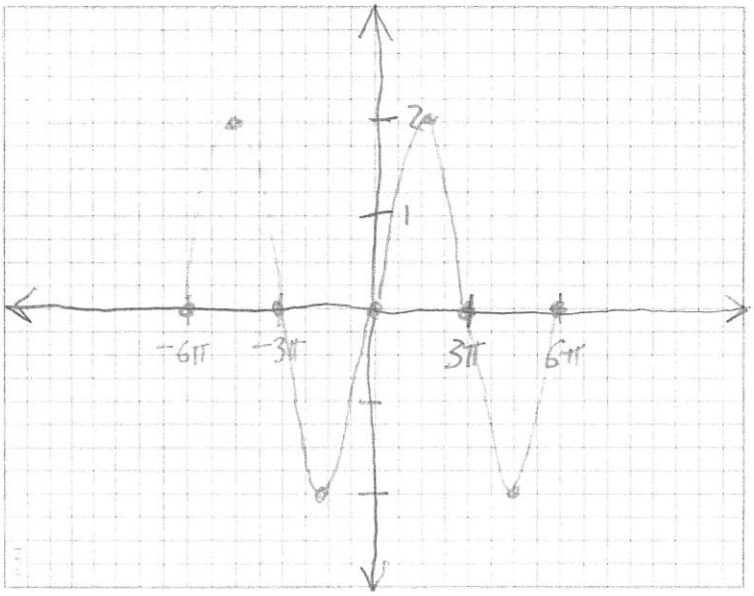
9. $y=\sin(2x)$



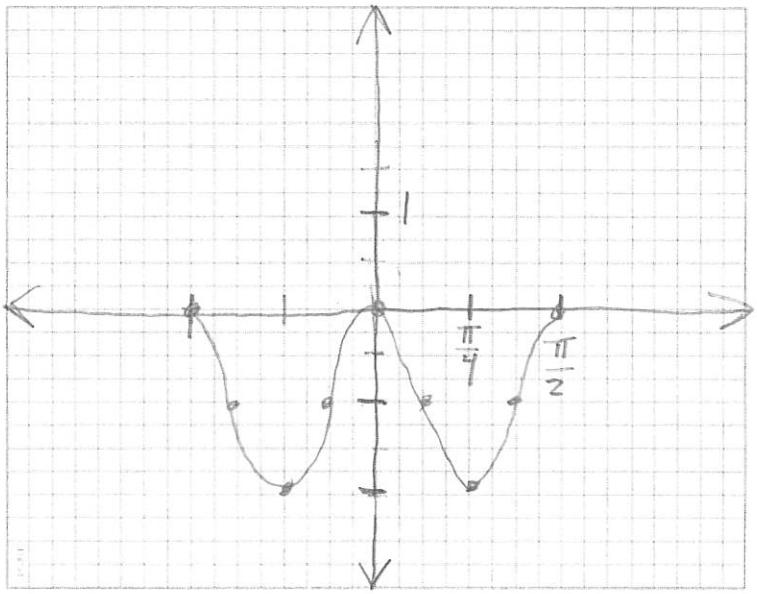
10. $y=\cos\left(\frac{1}{2}x\right)$



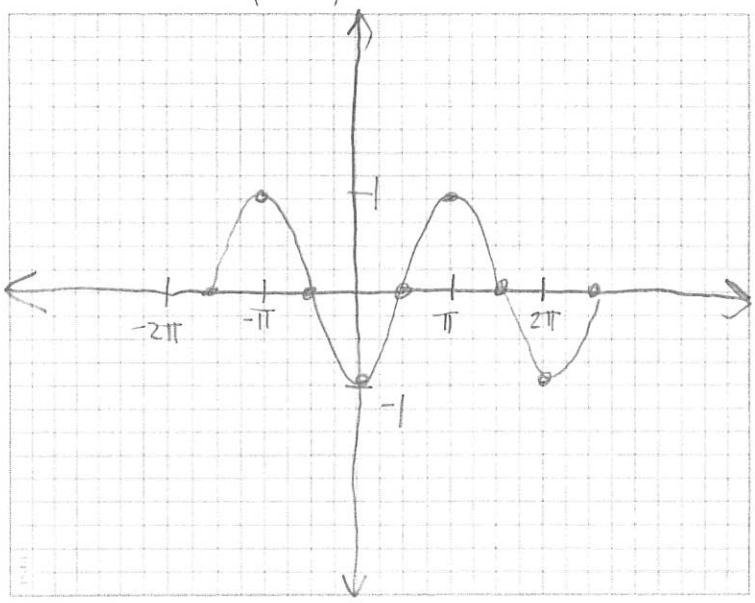
11. $y=2\sin\left(\frac{1}{3}x\right)$



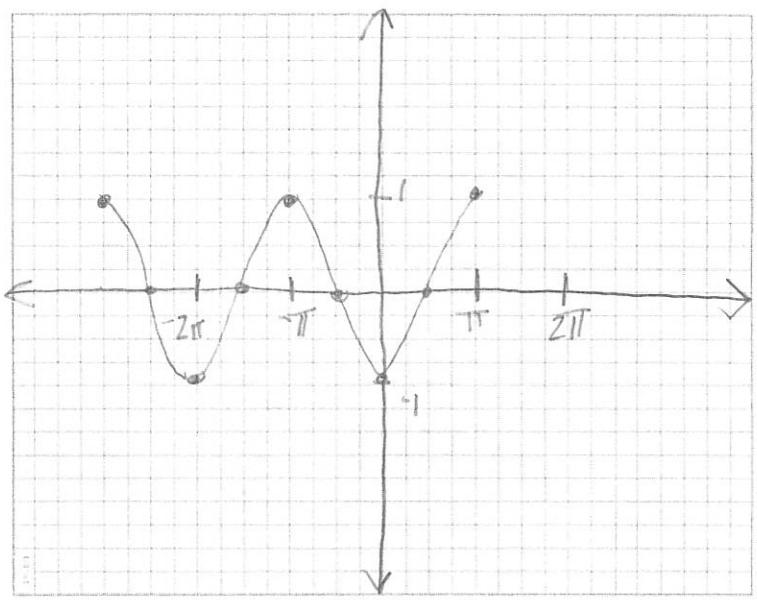
12. $y=\cos 4x-1$



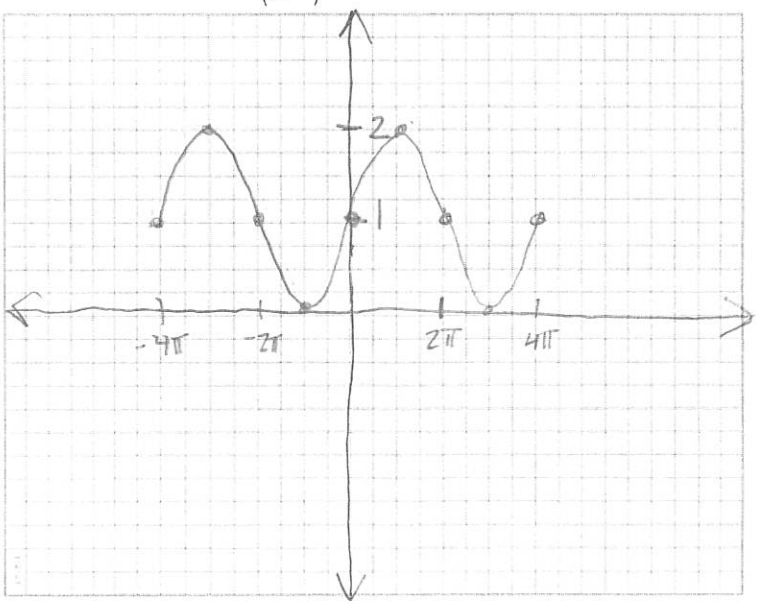
13. $y=\sin\left(x-\frac{\pi}{2}\right)$



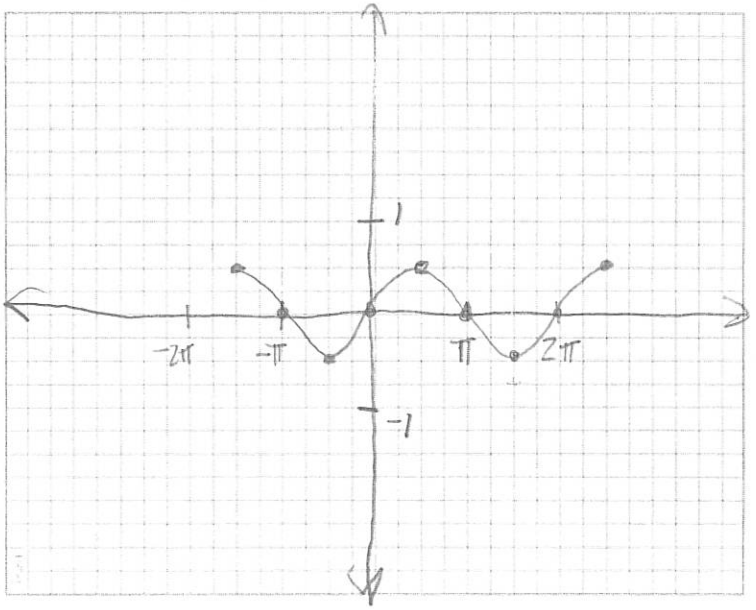
14. $y=\cos(x+\pi)$



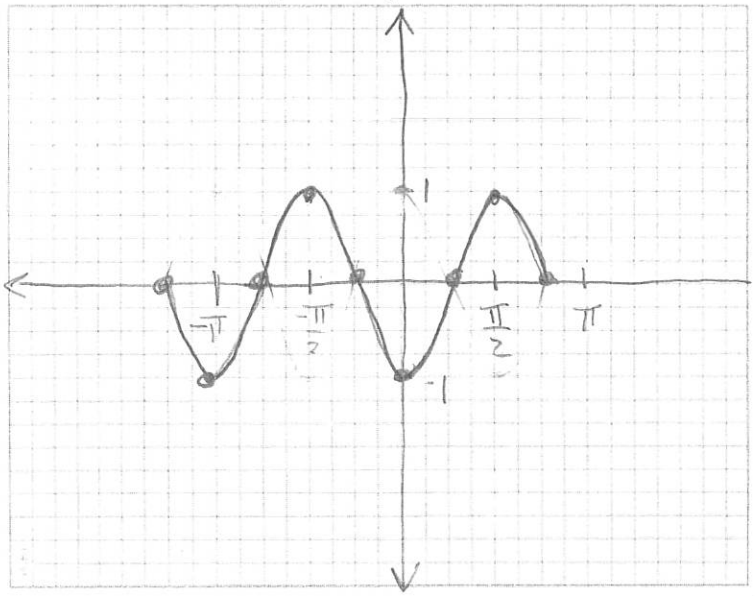
15. $y=\sin\left(\frac{1}{2}x\right)+1$



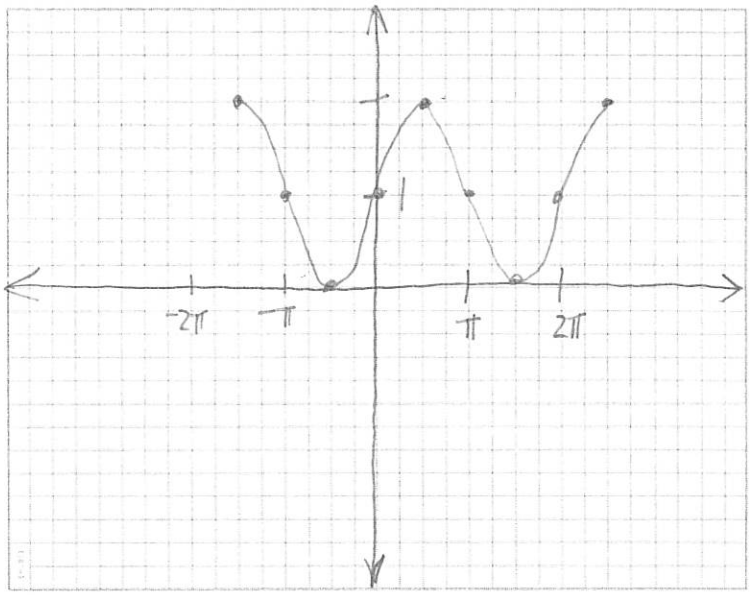
16. $y=\frac{1}{2}\cos\left(x-\frac{\pi}{2}\right)$



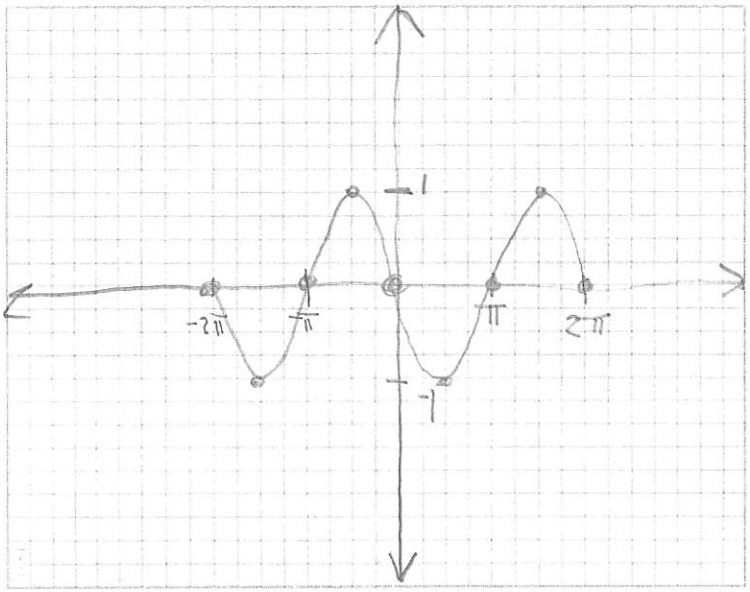
17. $y=-\sin\left[2\left(x+\frac{\pi}{4}\right)\right]$



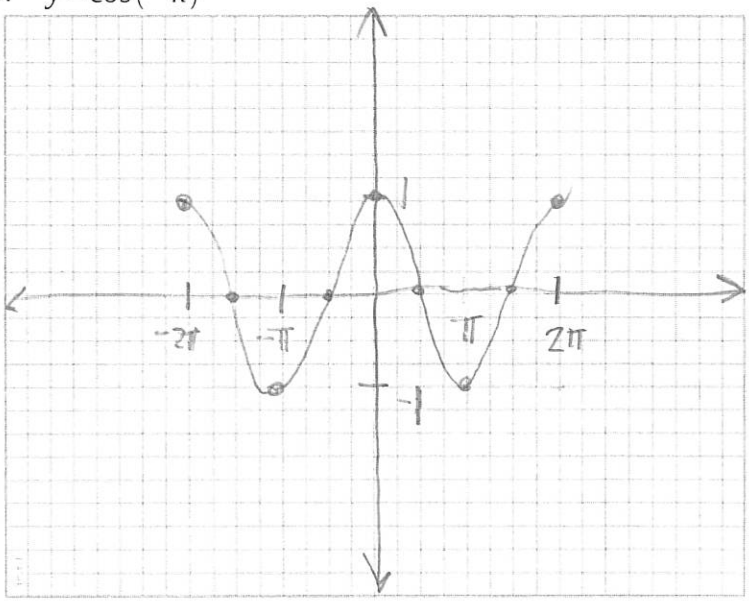
18. $y=\cos\left(x-\frac{\pi}{2}\right)+1$



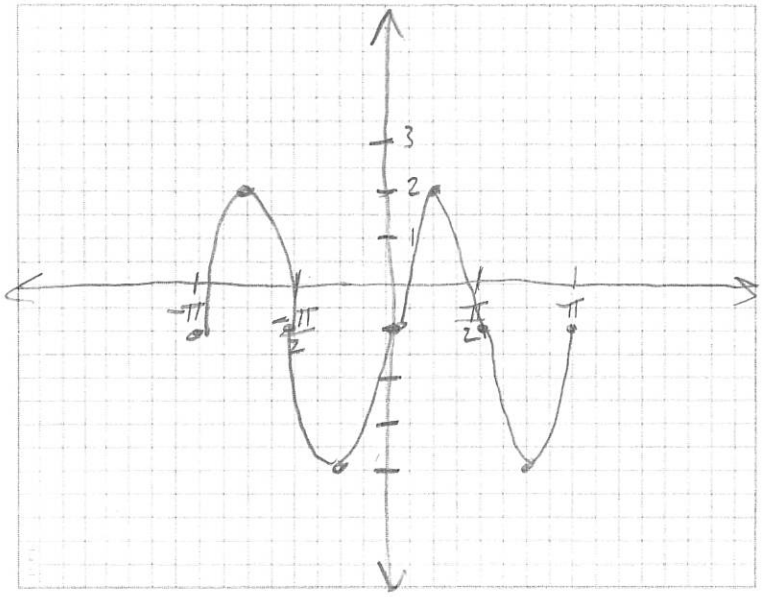
19. $\sin(-x)$



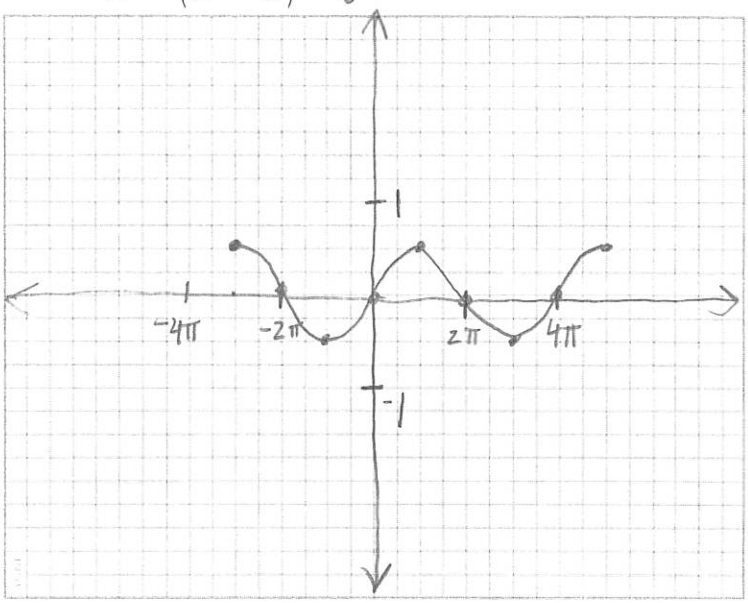
20. $y=\cos(-x)$



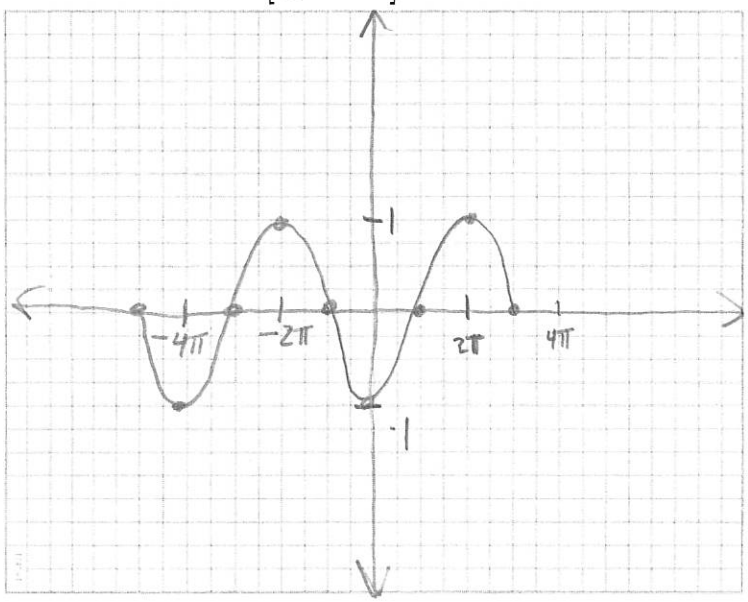
21. $y=3\sin(2x)-1$



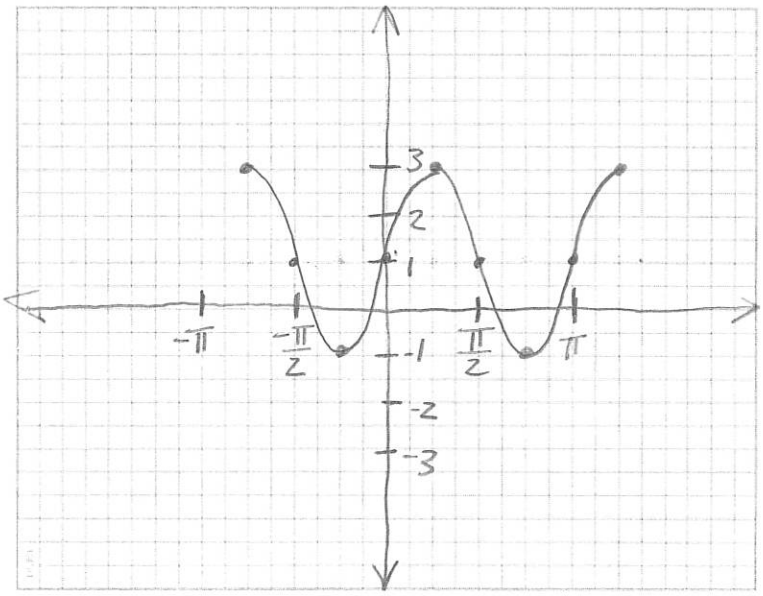
22. $y=\frac{1}{2}\cos\left(\frac{1}{2}x-\frac{\pi}{2}\right)$ $y=\frac{1}{2}\cos\left[\frac{1}{2}(x-\pi)\right]$



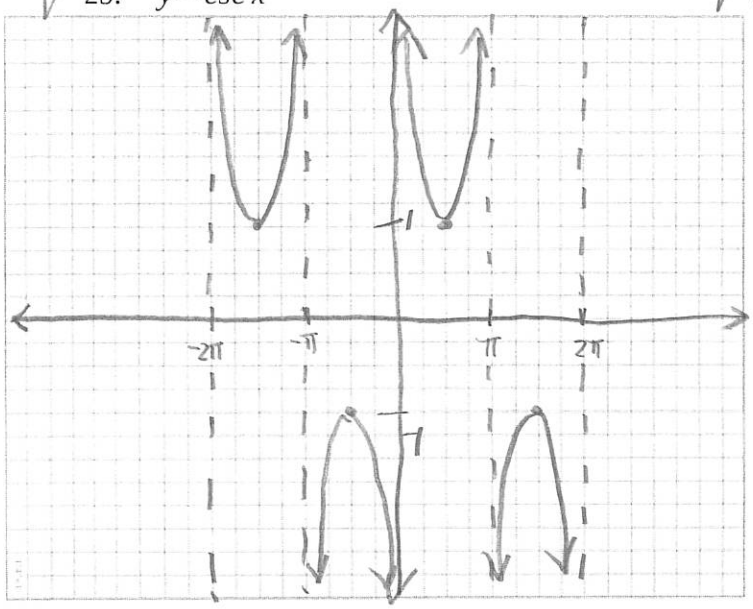
23. $y=-\sin\left[\frac{1}{2}(x+\pi)\right]$



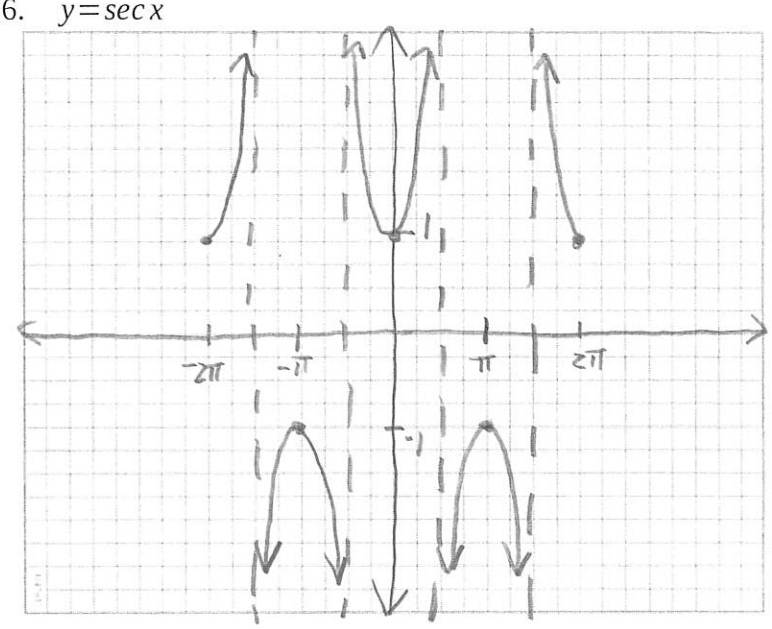
24. $y=2\cos\left(2x-\frac{\pi}{2}\right)+1$ $y=2\cos\left[2\left(x-\frac{\pi}{4}\right)\right]+1$



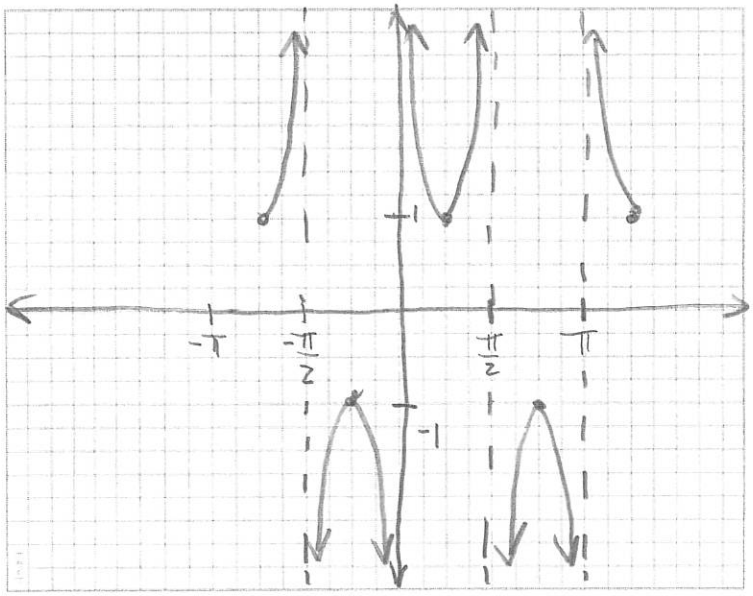
25. $y = \csc x$



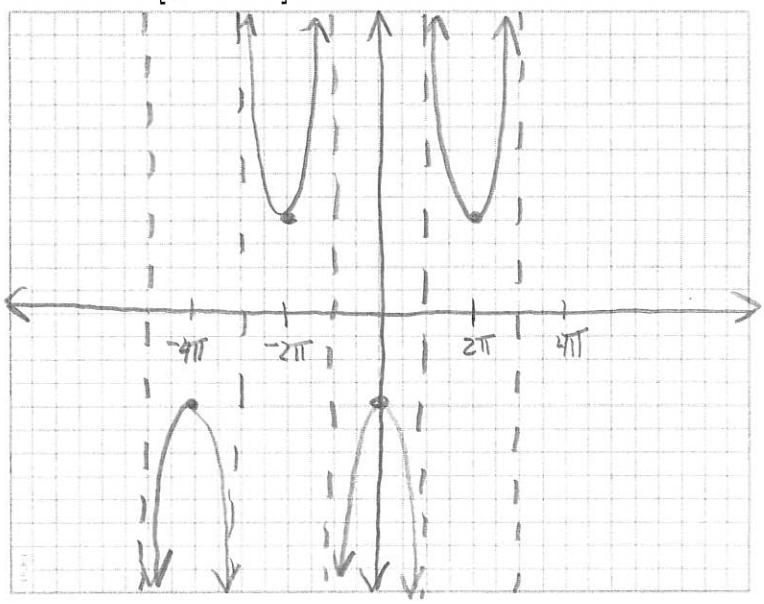
26. $y = \sec x$



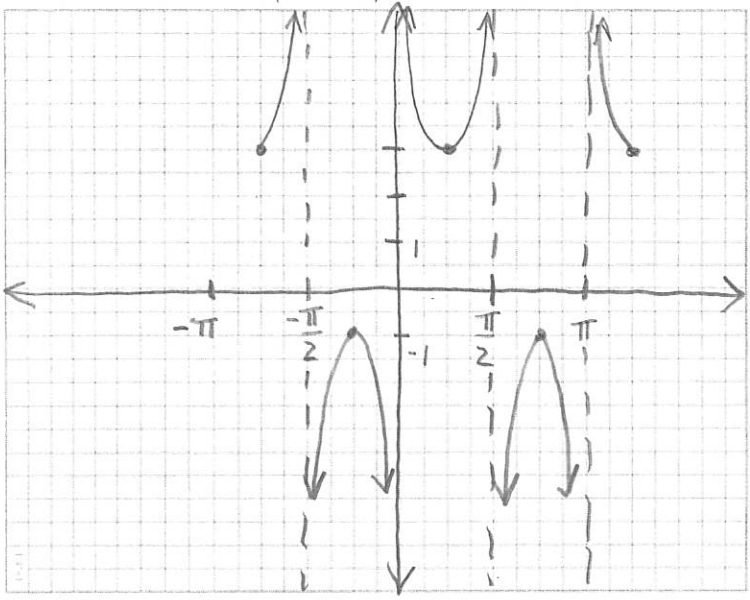
27. $y = \sec\left(2x - \frac{\pi}{2}\right)$ = $\sec\left[2\left(x - \frac{\pi}{4}\right)\right]$



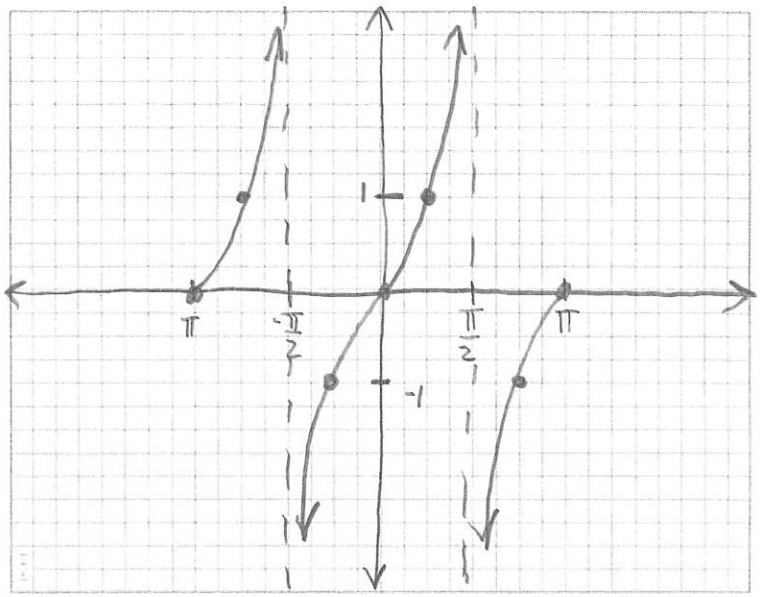
28. $y = -\csc\left[\frac{1}{2}(x + \pi)\right]$



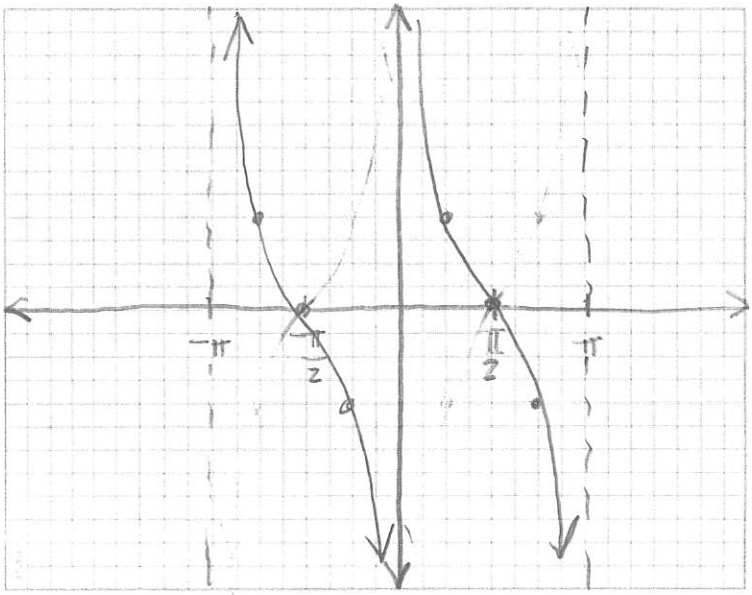
29. $y = 2\sec\left(2x - \frac{\pi}{2}\right) + 1 = 2\sec\left[2\left(x - \frac{\pi}{4}\right)\right] + 1$



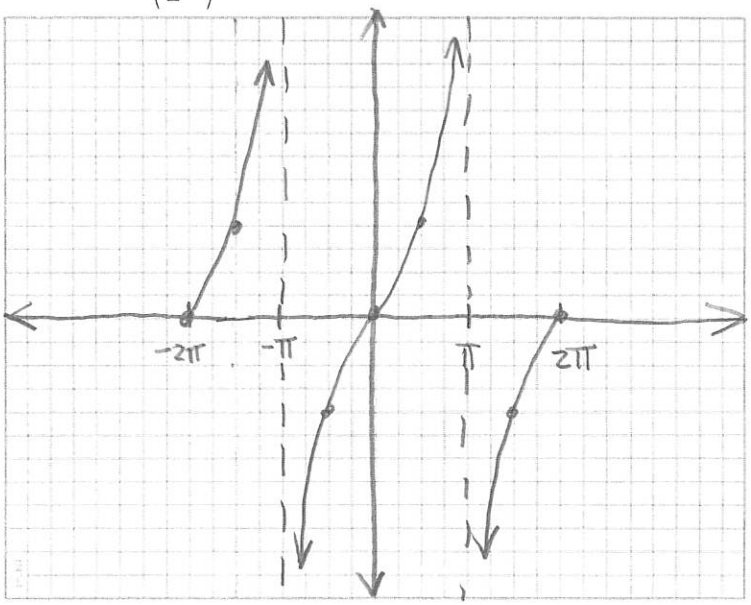
30. $y = \tan x$



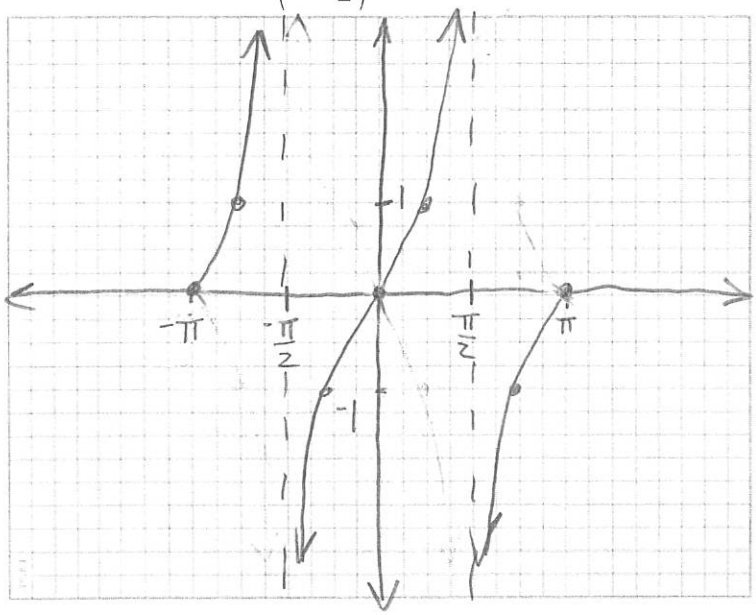
31. $y = \cot x$



32. $y = \tan\left(\frac{1}{2}x\right)$

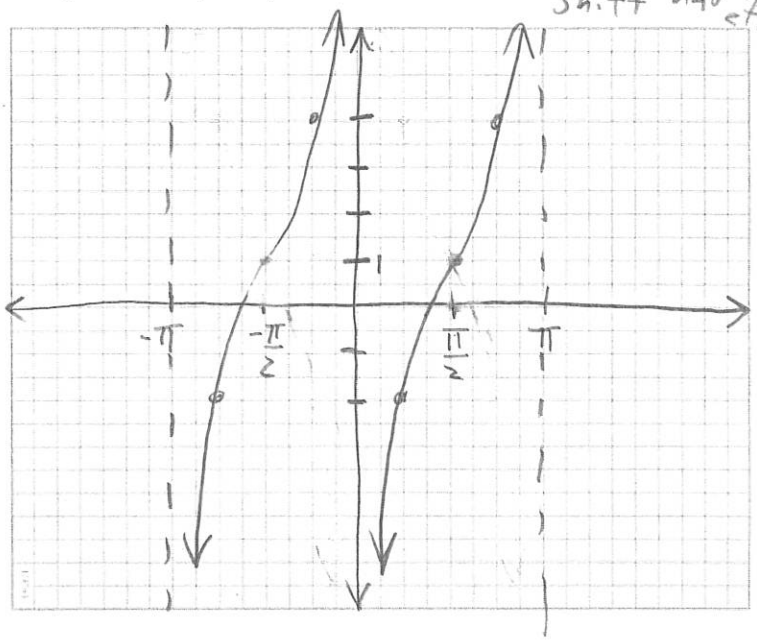


√ 33. $y=-\cot\left(x-\frac{\pi}{2}\right)$



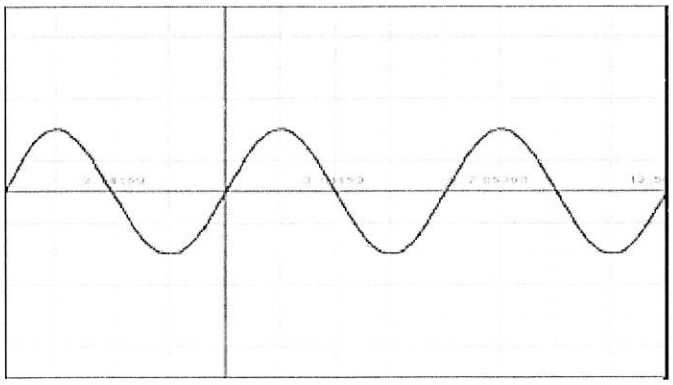
√ 34. $y=-3\cot(x+\pi)+1$

Note cot period = π
shift has no effect

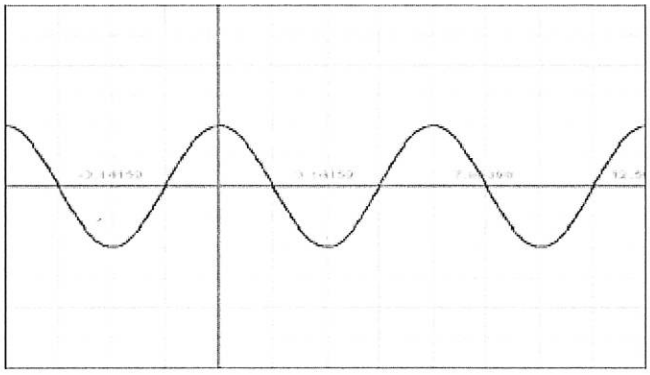


Give a sine **and** a cosine equation for each function. Horizontal scale is π/2 , vertical scale is 1.

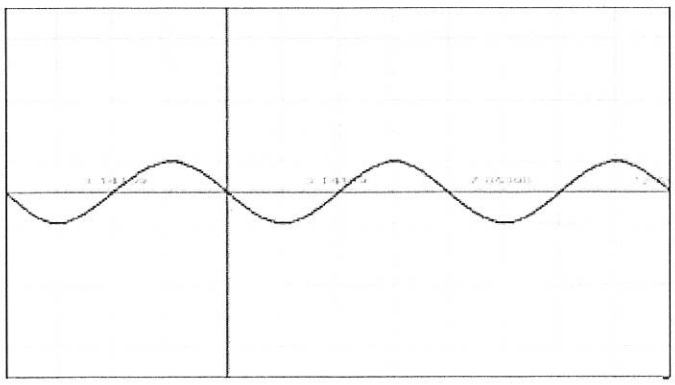
√ 35. $y = 2\sin x$ $y = 2\cos\left(x-\frac{\pi}{2}\right)$



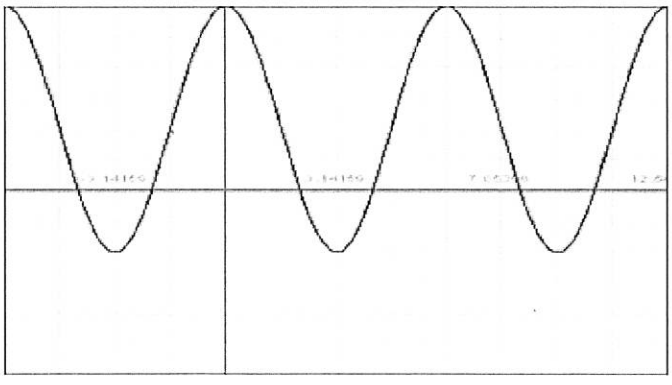
√ 36. $y = 2\cos x$ $y = 2\sin\left(x+\frac{\pi}{2}\right)$



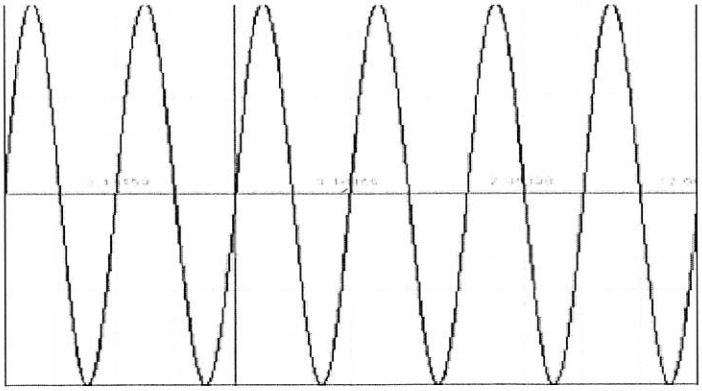
√ 37. $y = \cos\left(x+\frac{\pi}{2}\right)$ $y = -\sin x$



√ 38. $y = 4\cos x + 2$ $y = 4\sin\left(x+\frac{\pi}{2}\right)+2$



39. $y = 6 \sin 2x$
$y = 6 \cos \left[2\left(x - \frac{\pi}{4}\right)\right]$



40. $y = 2 \sin \left[\frac{1}{2}\left(x - \frac{5\pi}{4}\right)\right]$
$y = -2 \cos \left[\frac{1}{2}\left(x - \frac{\pi}{4}\right)\right]$