

For the following functions, find a) the vertical shift, b) the phase shift, c) the period, d) the vertical stretch.

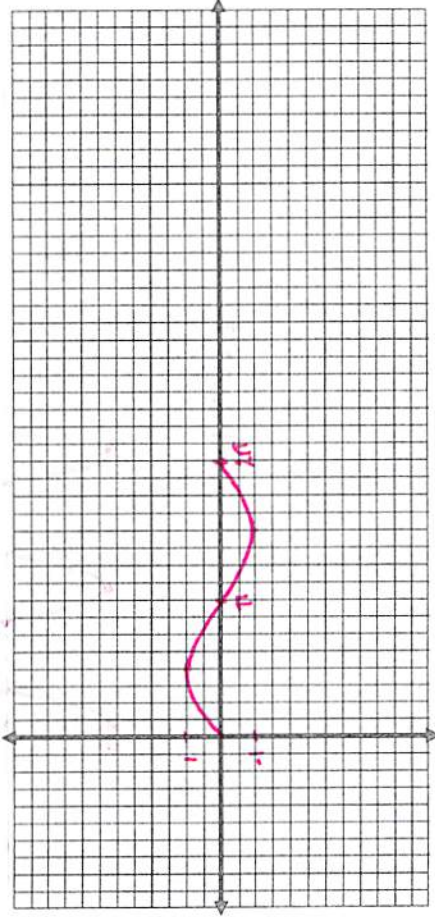
- $y = 2 \sin 2 \left(x - \frac{\pi}{3} \right) - 7$

a) DOWN 7 b) RIGHT $\frac{\pi}{3}$ c) π d) 2
- $y = -5 \cot 4 \left(x + \frac{5\pi}{3} \right) + 2$

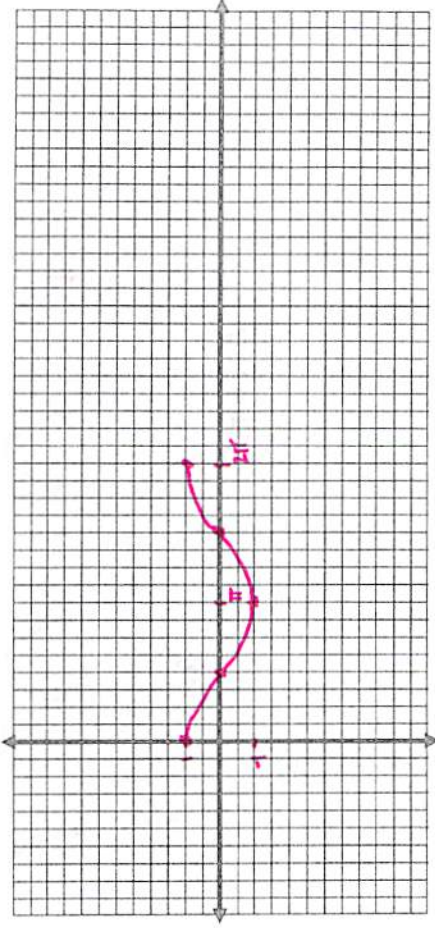
a) UP 2 b) LEFT $\frac{5\pi}{3}$ c) $\frac{\pi}{4}$ d) 5

For each graph, sketch an accurate and complete graph over the domain $0 \leq x \leq 2\pi$.

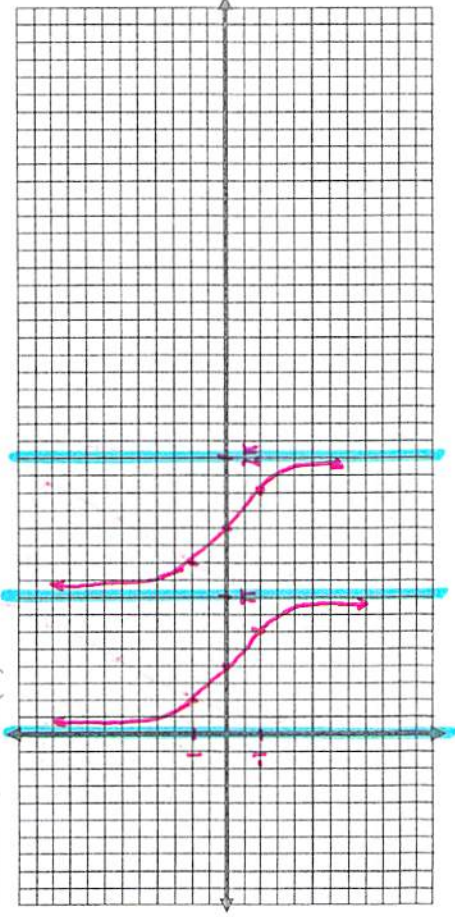
3. Graph: $y = \sin(x)$



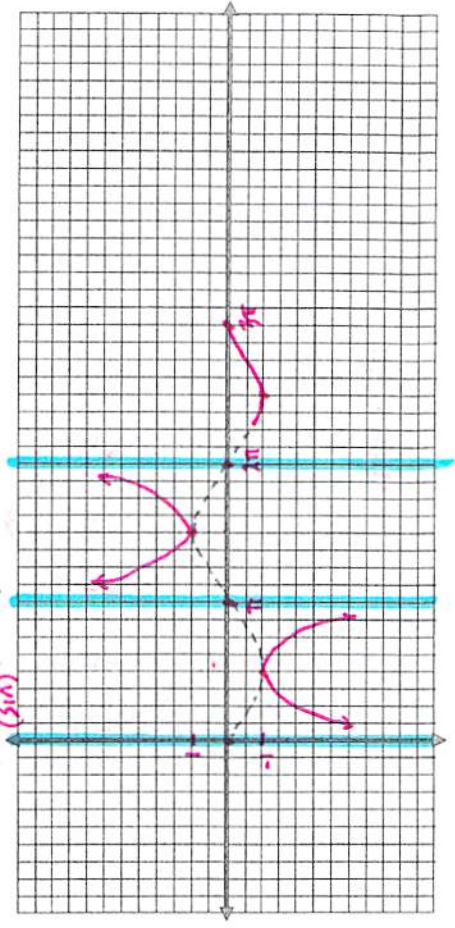
4. Graph: $y = \cos(x)$



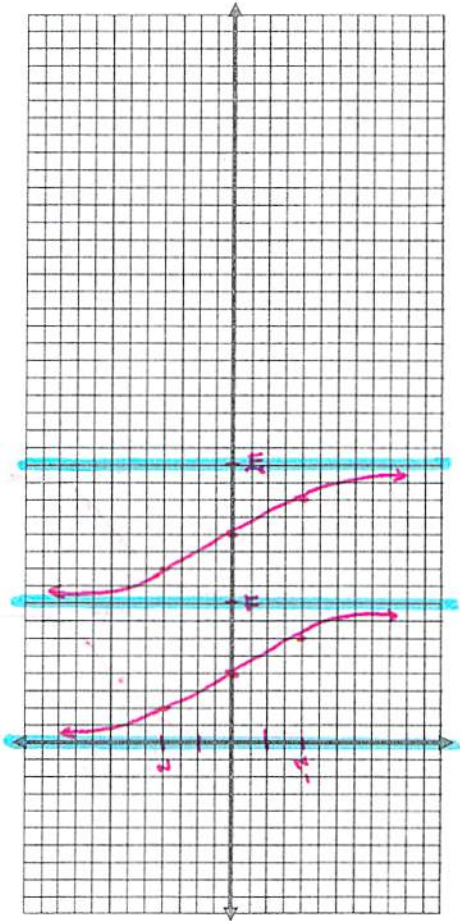
5. Graph: $y = \cot(x)$



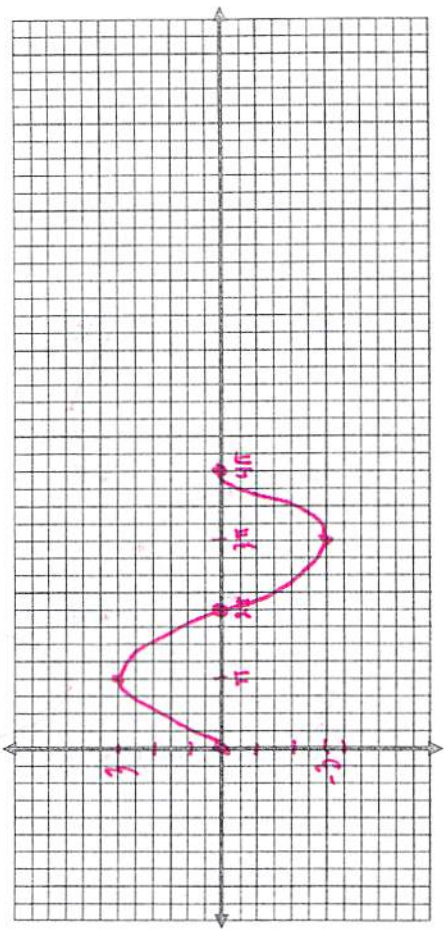
6. Graph: $y = \csc(x - \pi)$



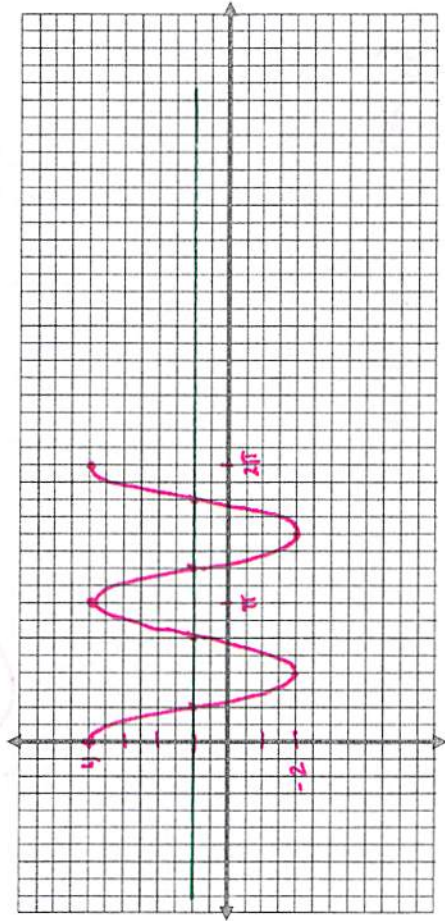
7. Graph: $y = -2 \tan \left(x - \frac{\pi}{2} \right)$



8. Graph: $y = 3 \sin \frac{1}{2}(x)$ PERIOD: 4π



9. Graph $y = 3 \cos 2(x - \pi) + 1$ PERIOD: π



10. Graph: $y = \sec 2 \left(x - \frac{\pi}{3} \right)$ PERIOD: π

