

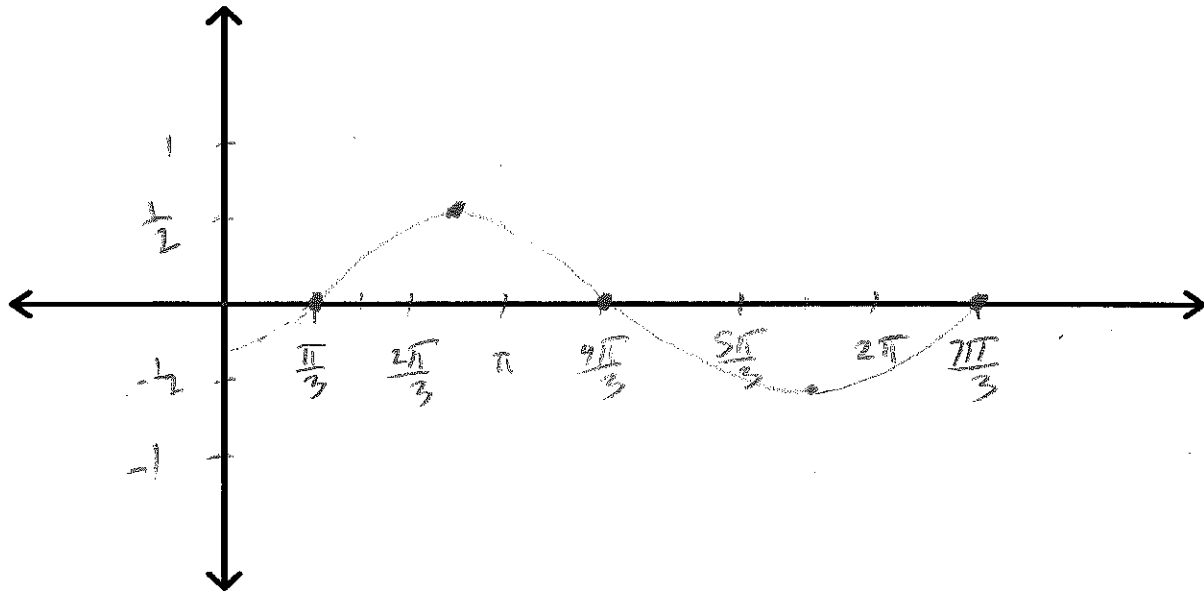
Sections 4.5 – Graphs of Sine & Cosine Functions (Day 3)

Sketch graphs of the following:

a) $y = \frac{1}{2} \sin\left(x - \frac{\pi}{3}\right)$

← shift right $\frac{\pi}{3}$

← vertical compression

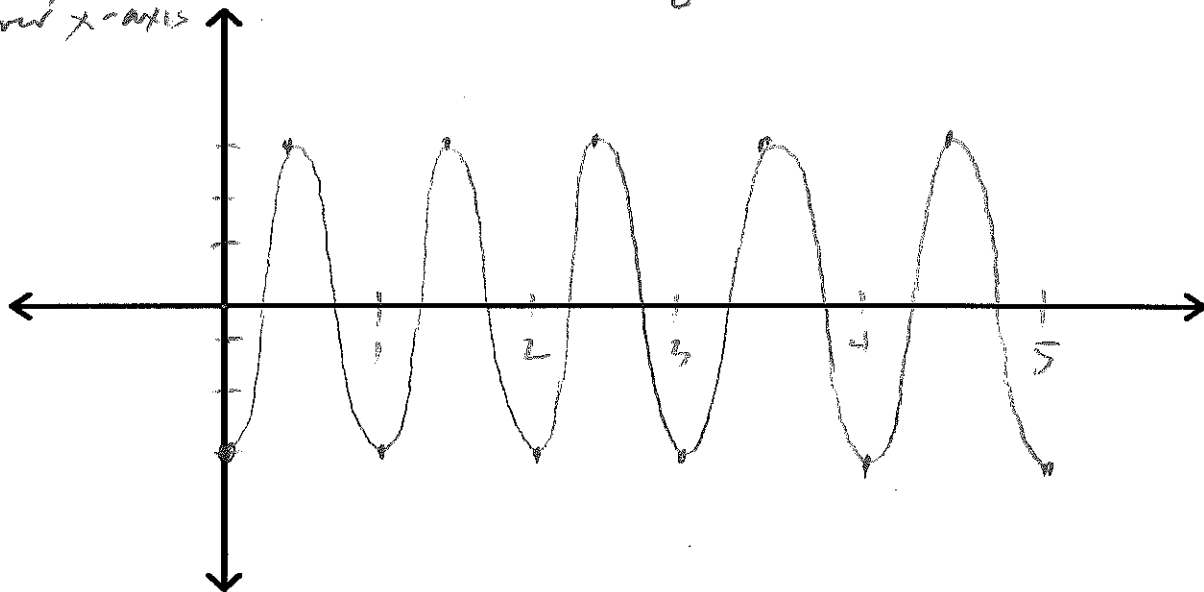


b) $y = -3\cos(2\pi x)$

← period = $\frac{2\pi}{2\pi} = 1$ ← change x-axis

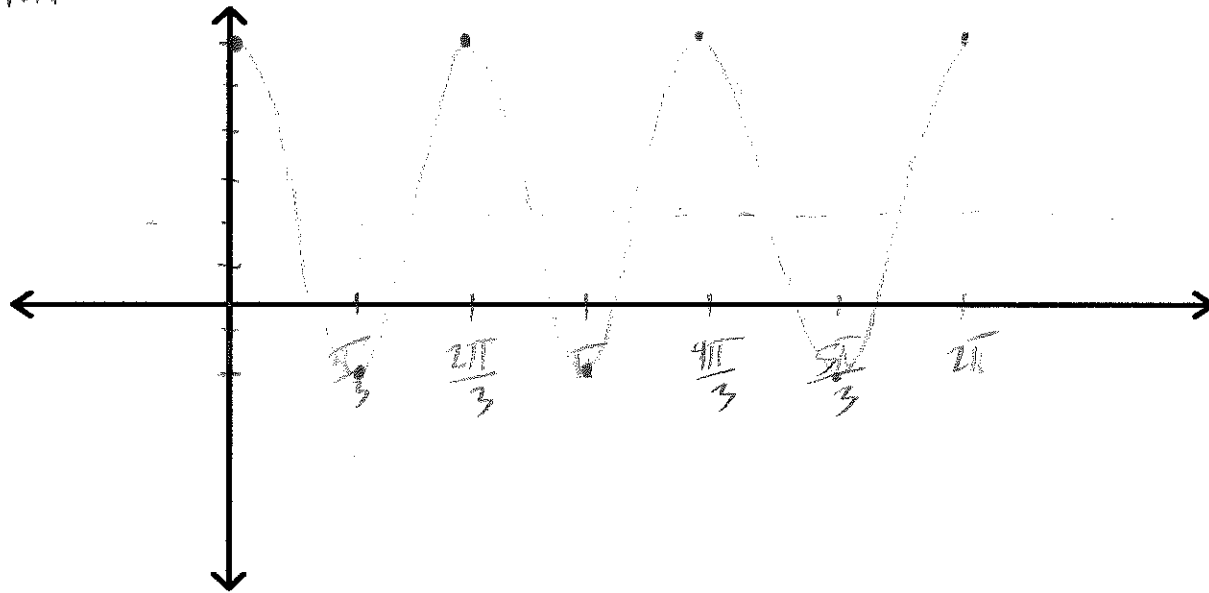
← vertical stretch by 3

← reflect over x-axis



Sections 4.5 – Graphs of Sine & Cosine Functions (Day 3)

c) $y = 4\cos 3x + 2$
 ↑ vertical stretch
 ← shift up 2
 period = $\frac{2\pi}{3}$ and you see 3 curves in 2π



d) $y = -\sin 2(x - \pi) - 1$
 ← reflect
 ← down 1
 period = π
 ← right π

