

Exact Trig ValuesWithout a calculator, evaluate each trig function at the given angle (*I recommend you make a separate drawing for each*)

1. $\cos \frac{7\pi}{6}$

2. $\sin \frac{3\pi}{2}$

3. $\tan \frac{3\pi}{4}$

4. $\cos \frac{-2\pi}{3}$

8. $\sin \frac{11\pi}{6}$

9. $\tan(-\pi)$

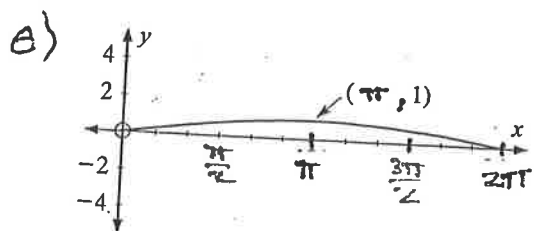
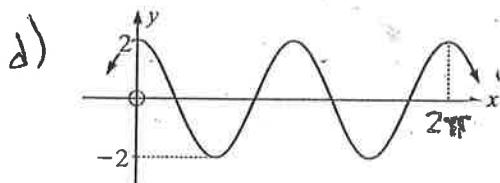
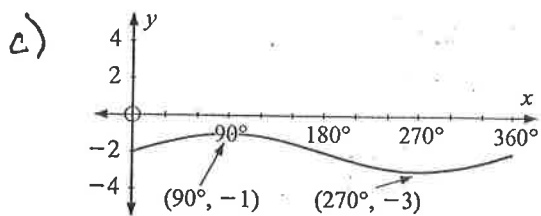
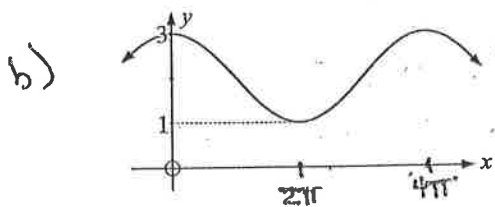
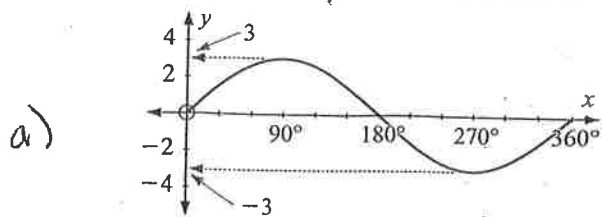
10. Without a calculator, solve for each angle(s) that makes the given equation true on the interval
- $[0, 2\pi]$
- .

$$\sin \theta = \frac{\sqrt{2}}{2}$$

$$\cos \theta = -\frac{\sqrt{3}}{2}$$

11. Draw a Unit Circle. Draw an rotation angle of around 100 degrees. Draw a line segment that represents the length of the the approximate value of
- $\sin(100^\circ)$
- . Eyeballing this segment, estimate the approximate value of
- $\sin(100^\circ)$
- to the nearest 0.1

12. Determine the equation of each periodic function. Show your calculation for the b value.



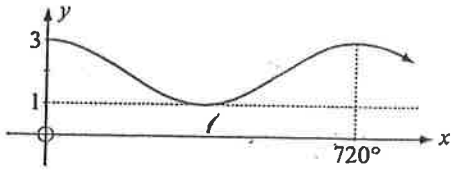
13. On separate paper make an accurate, labeled, sketch for each below

a) $f(\theta) = 8 \sin(2\theta)$ label with radians

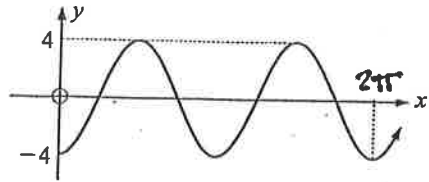
b) $f(\theta) = 15 \cos\left(\frac{x}{2}\right)$ label with degrees

c) $f(t) = 1000 \sin(5t)$ label with radians

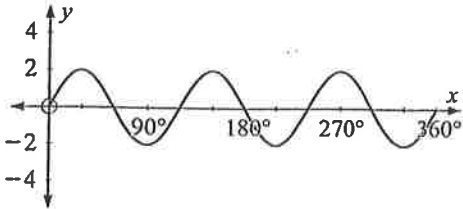
A



B



C



D

