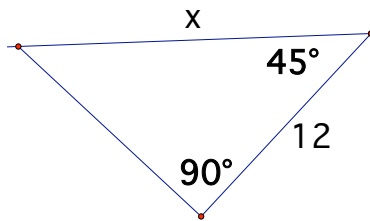


# Quiz 5

Show *all* your work. No credit is given without reasonable supporting work. There are *two* sides to this quiz.

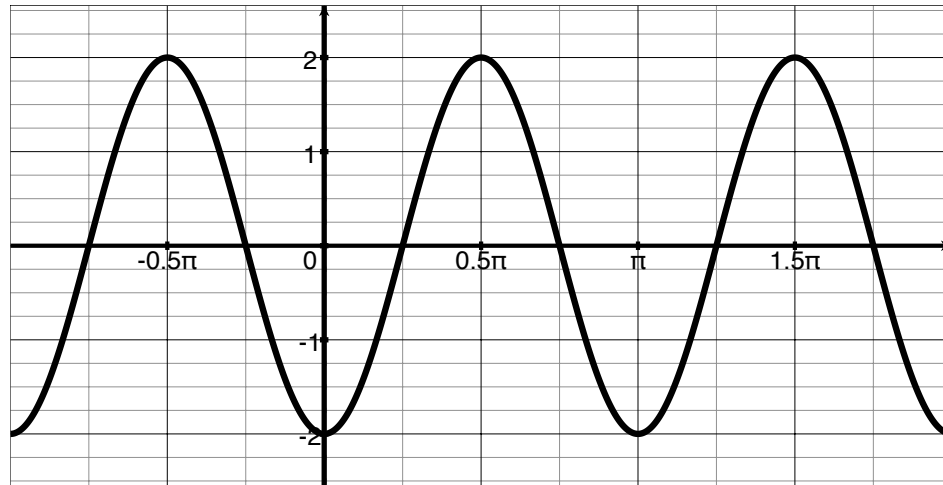
1. [3] (§5.2 #69) Given  $\frac{\pi}{2} \leq \theta \leq \frac{3\pi}{2}$  and  $\sin \theta = \frac{-1}{5}$ . Find  $\tan \theta$ .

2. [1] (WebHW14 #10) Find the length of the side marked  $x$  in the triangle below.



3. [3] (WebHW13 #13) Write an equation that represents the curve below in the form:

$$y = a \cos k(x - b)$$



4. [3] (§7.4 #3 & 19) Evaluate the following exactly:

$$\arcsin\left(\frac{-1}{\sqrt{2}}\right)$$

$$\sin^{-1}\left(\sin\left(\frac{\pi}{6}\right)\right)$$