

Quiz 4

Show *all* your work. Reasonable supporting work must be shown to earn credit. There are *two* sides to this quiz.

1. The maximum afternoon temperature T in a city was modeled by the formula $T = 75 - 10 \cos\left(\frac{x\pi}{6}\right)$, where January corresponds to $x = 1$.

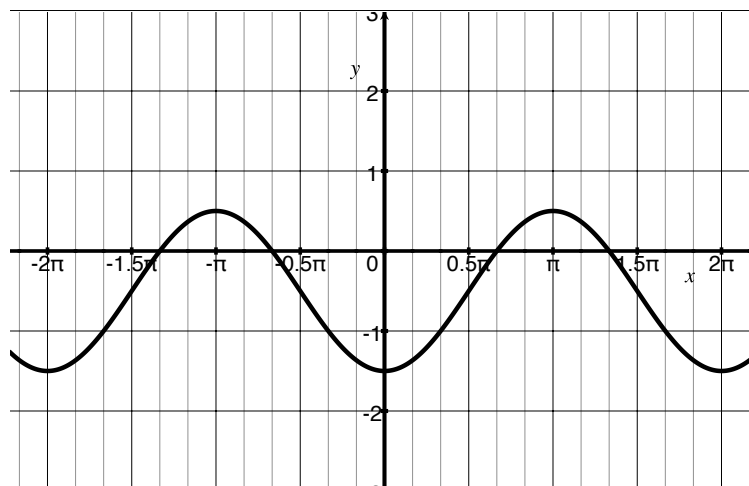
(a) [1] (WebHW11 #16) What is the maximum afternoon temperature in March?

(b) [1] What is the period of this function?

2. [3] (TrigDefActivity #3) Let $\pi < \theta < \frac{3\pi}{2}$ and $\cos(\theta) = -\frac{8}{17}$. Find the exact (fraction) value of $\sin(\theta)$.

3. The graph of f shown on the right is a trigonometric function.

(a) [1] (TrigTransform #4)
What is the amplitude of f ?



(b) [2] (WebHW12 #7) Find the equation for the graph of f .

(c) [2] Find a second, *distinct or different* answer for part c.