

Quiz 3

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

1. (§4.3 #52 or HW13 #23) Let $\pi < \theta < \frac{3\pi}{2}$ and $\cos \theta = \frac{-8}{17}$.

(a) [1] Which quadrant is θ in?

(b) [3] Find $\sin \theta$ *exactly*.

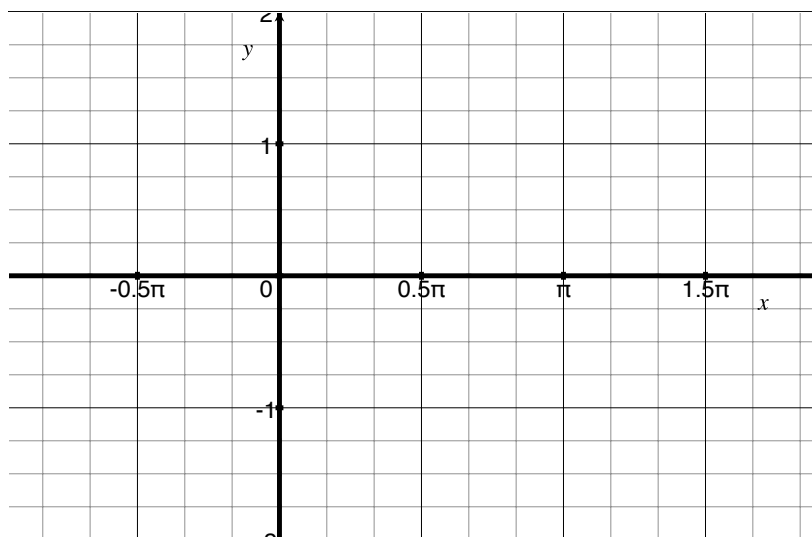
(Decimal approximations are not sufficient although worth partial credit!)

2. Let $f(x) = \sin(x)$.

(a) [1] Graph of f .

(b) [1] What is the range of f ?

(c) [1] Does f have an inverse? Why or why not?



(d) [1] (WebHW12 #5) Let $g(x) = f(2(x + \frac{\pi}{2}))$. Find the period of g .

(e) [2] (TrigGraphWks pg 4) Sketch the graph of $g(x)$