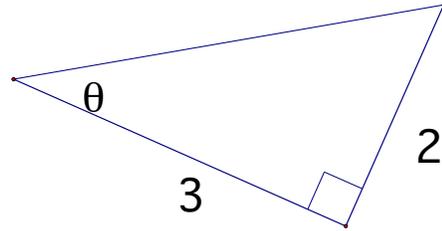# Quiz 5

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

1. (§6.2 #5) Given the angle θ in the right triangle show on the right, answer the following:

   (a) [1] $\tan \theta$

   (b) [2] $\cos \theta$

2. [2] (WebHW13 #7) Let θ be an angle whose terminal side is in the 3rd quadrant and $\tan(\theta) = \dfrac{1}{3}$. Find $\sin(\theta)$

3. (§5.3 #47) Let f be the function graphed below.

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

(b) [1] Find the amplitude of f.

(c) [1] Find the period of f.

(d) [1] Find the phase shift of f.

(e) [1] Write an equation that represents the graph of f in the form $y = a \sin k(x - b)$.