

# Solution

PRINT your name \_\_\_\_\_

Quiz for January 27, 2009 – 9:30 section

Remove everything from your desk except this page and a pencil or pen.

Circle your answer. Show your work. Each question is worth 5 points.

1. Solve for  $x$ :  $\log_5(5^{2x}) = 8$ .

**Answer:** The given equation is equivalent to  $5^8 = 5^{2x}$ , which is the same as  $8 = 2x$  or  $x = 4$ .

2. For the function graphed below, find

- (a)  $\lim_{x \rightarrow 0^-} f(x) = 1$
- (b)  $\lim_{x \rightarrow 0^+} f(x) = -\infty$
- (c)  $\lim_{x \rightarrow 0} f(x)$  Does not exist
- (d)  $f(0) = -2$

