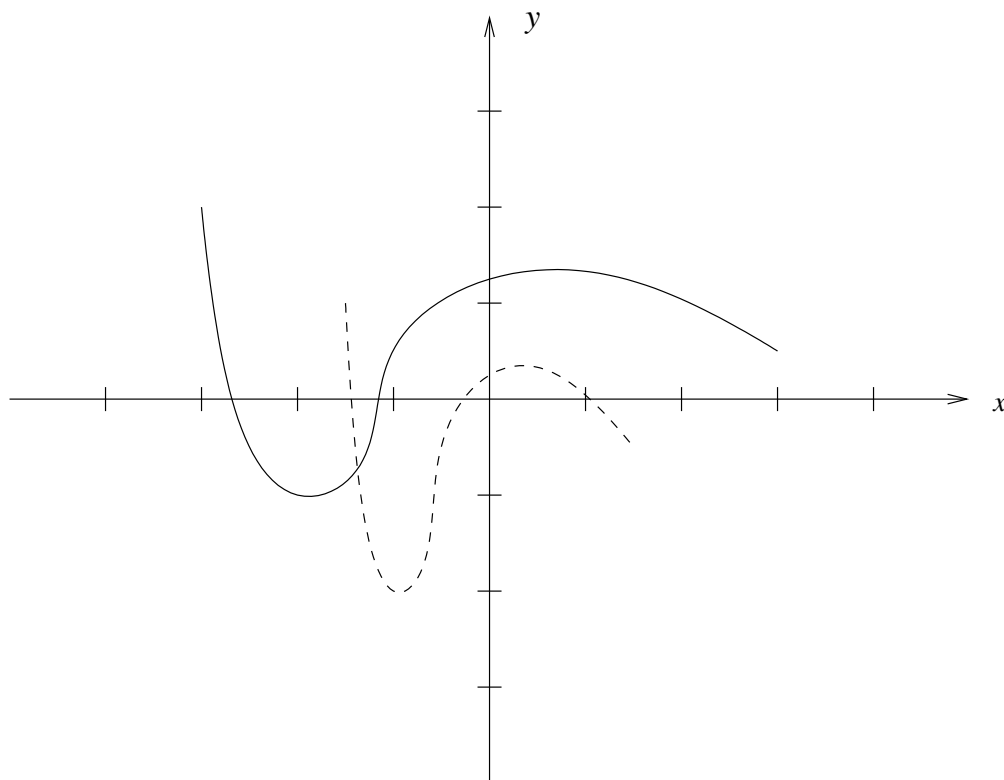


**Quiz 1 Solution (version A)**

Name \_\_\_\_\_

Student ID Number \_\_\_\_\_

1. The graph  $y = f(x)$  of a function  $f$  is shown. On the same grid, sketch the graph of  $y = f(2x) - 1$ .



2. Find the inverse function  $f^{-1}(x)$  of the function  $f(x) = \sqrt{3x-2}$ , and specify the domain of  $f^{-1}(x)$ .

$$f^{-1}(x) = (x^2 + 2)/3, \text{ with domain } [0, \infty).$$

3. Evaluate  $\log_5(50) + 2\log_5(2) - \log_5(8)$ .

$$\log_5(50) + 2\log_5(2) - \log_5(8) = \log_5(25) = 2.$$