

This quiz is worth 10 points, and you have 10 minutes to complete it.

Calculators are NOT allowed today.

1. (10 pts) Find the derivative of $f(x) = x^2 - 4$ two ways, as described below. Show all work carefully.

(OF COURSE, YOU WILL GET NO CREDIT FOR USING “SHORTCUT” RULES YOU MAY KNOW FROM A PREVIOUS CLASS.)

(a) Using the definition of derivative:

(b) Using the alternative definition of derivative: