

This quiz is worth 10 points and you have 10 minutes to complete it. Show all work and circle your final answers.

Calculators ARE allowed today.

1. (4 pts) Find the derivative of $f(x) = \frac{(x+1)(3x-4)}{\sqrt{x^3-27}}$.

2. (6 pts) Differentiate the function $f(x) = x^{-\frac{2}{3}}(x^3 - \sqrt{x})$ two ways, as follows:

a. (3 pts) Using the product rule.

b. (3 pts) Without using the product rule.