

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

Calculators ARE NOT allowed today.

1. (3 pts) Given that s is a function of r , find $\frac{d}{dr}(rs^2)$.

2. (3 pts) Suppose $g(x)$ is some function with $g(2) = 3$, $g(3) = 4$, and $g(4) = 5$ whose derivative has values $g'(2) = 5$, $g'(3) = 3$, and $g'(4) = 2$. If $f(x) = xg(x^2)$, find $f'(2)$.

3. (4 pts) Write the domain of $f(x) = \frac{\sqrt{3-x}}{x^2-3x-4}$ in interval notation. Show all work.