

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

Calculators are NOT allowed today.

1. (4 pts) Sketch the graph of a function $f(x)$ that is concave down on $(-\infty, 2)$, concave up on $(2, \infty)$, and always increasing. There may be more than one correct answer.

2. (6 pts) Find the domain of $f(x) = \frac{1}{\sqrt{x-1}} - \frac{\sqrt{x}}{x-2}$. Show your work clearly or you will not get full credit. Write your answer in interval notation, and circle your final answer.