

Tips of the Exam

There are several important points/common errors that we need to make clear before we take the first exam.

- **Read the Directions! Answer what is asked!**
- Show work, make sure that your work clearly leads to the answer you give.
- If the question asks for a point on a curve (such as an extreme point or an inflection point), you need to give an answer of the form (x, y) . For example, if asked to find the inflection point of $f(x) = x^3 - 3x + 2$ a completely correct answer would be $(0, 2)$, not just $x = 0$.
- If we are asked to find the derivative of $f(x) = x^2 - 5$, writing down $2x$ is not sufficient as an answer. You need to write $f'(x) = 2x$.
- If a problem says to calculate a derivative a certain way (from the limit definition, or via the chain rule for example), use that method to obtain the answer. The work is more important than the answer (and is graded accordingly).
- When using the chain rule $\frac{dy}{dx} = \frac{dy}{du} \cdot \frac{du}{dx}$, make sure to label correctly each derivative. In this case the prime notation is ambiguous (does y' mean $\frac{dy}{dx}$ or $\frac{dy}{du}$?)
- **Read the Directions! Answer what is asked!**