

Worksheet #10 - What do derivatives tell us

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Please print your name(s) at the top of the page. Please answer in complete sentence.

What about the graph of $f(x)$?	Positive	Zero	Negative
$f(x)$			
$f'(x), \frac{dy}{dx}$			
$f''(x), \frac{d^2y}{dx^2}$			

- How do you use this chart ? What is the value of x when we use when using this chart? Fill in the chart with the short answered terms that we have covered in class.

- Write a complete sentence that describes the case when $f(4) = -5$?

- Write a complete sentence that describes the case when $f'(10) = -5$?

- Write a complete sentence that describes the case when $f''(-4) = 5$?

- Can there be a function such that $f'(3) = 2$ and $f''(3) = -1$? If so, write a sentence describing this situation?