Webwork Hand-In Problems: Section 3.2

10. Sketch the graph of the following function:

\[ A(x) = \begin{cases} 
  x^3 & \text{if } -2 \leq x \leq -1 \\
  x^2 & \text{if } x > -1 
\end{cases} \]

11. Sketch the graph of the following function:

\[ B(x) = \begin{cases} 
  \frac{\sqrt{1-x^2}}{x} & \text{if } -1 \leq x < 1 \\
  \frac{1}{x} & \text{if } x \geq 1 
\end{cases} \]

12. Sketch the graph of the following function:

\[ C(x) = \begin{cases} 
  x^3 & \text{if } x < 1 \\
  \sqrt{x} & \text{if } x > 1 
\end{cases} \]

13. Sketch the graph of the following function:

\[ y = \begin{cases} 
  |x| & \text{if } x \leq 0 \\
  x^2 & \text{if } x > 0 
\end{cases} \]
15. What is the definition of the average rate of change of a function $g$ on an interval $[c, d]$?

What does this have to do with slope?