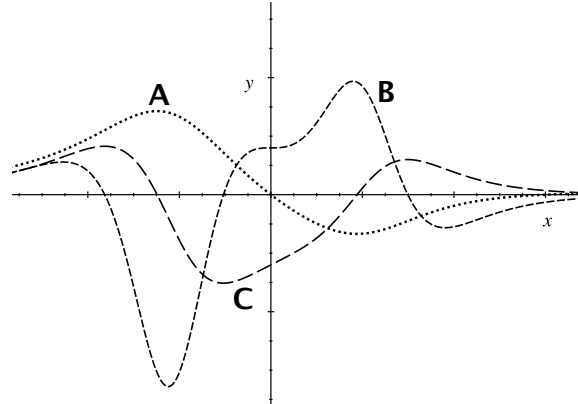


7. [6 points] Consider the function  $W(t) = 3 \ln(\sin(t)^2 + 2)$ . Write down the limit definition of  $W'(\pi)$ . (You do not need to estimate or compute the derivative.)
8. [9 points] The three graphs labeled A, B, and C below depict a function  $g$  along with its first and second derivatives ( $g'$  and  $g''$ ). Determine which is which.



Your answer to parts (a)–(c) should be a single legible capital letter (A, B, or C).

- a. [2 points] The graph of  $g$  is labeled \_\_\_\_\_.
- b. [2 points] The graph of  $g'$  is labeled \_\_\_\_\_.
- c. [2 points] The graph of  $g''$  is labeled \_\_\_\_\_.
- d. [3 points] Briefly explain your reasoning.