



QUESTION 3. Let  $F(x) = \frac{4 - x^2}{|2 - x|} + |x|$ .

a) Find  $\lim_{x \rightarrow 2^+} F(x)$ .

b) Find  $\lim_{x \rightarrow 2^-} F(x)$ .

c) Does  $\lim_{x \rightarrow 2} F(x)$  exist? Answer:

Justify your answer:

QUESTION 4. Consider the function  $f(x) = \frac{2011}{x^2}$ . Use the definition of the derivative to compute  $f'(2)$ .

Answer: