

Rubric for Final Exam Question:

Item	Points
Part (a)	
Recognizes the derivative is related to slopes of lines on the graph by writing one of the three slopes given in the table, even if it is incorrect	1
Recognizes that the derivative is negative and writes a negative value, even if it is incorrect or found by some other method than using the values in table	1
Chooses the correct value for $f'(3)$ by recognizing that it is the slope of line a, the tangent line ($f'(3) = -2.83$)	1
Part (b)	
Recognizes that the average rate of change can be found with the slope of a line on the graph by choosing one of the three slopes given in the table, even if it is incorrect	1
Recognizes that average rate of change is negative and gives a negative value, even if it is incorrect or found by some other method than using the values in the table (such as guessing function values and attempting to calculate)	1
Chooses the correct value for the average rate of change by recognizing that is the slope of line b, the secant line ($= -2.422$)	1
Total Points	6

Students are often thrown by the fact that there are no calculations required in this problem. They may attempt to guess function values and calculate, so there are intentionally no values given on the vertical axis.