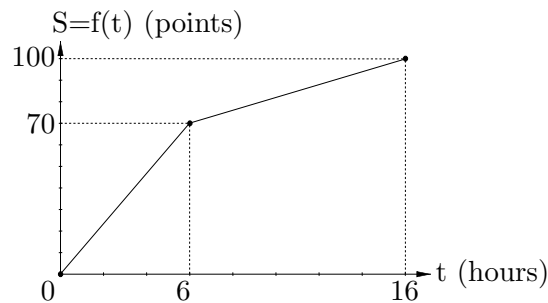**3**. [9 points] Let t be the number of hours you spent studying for a midterm, which is worth 100 points. Let S be your score in the midterm, and let G be the letter grade you get. The graph of the function f so that $S = f(t)$ is drawn below.

Also, the function h so that $G = h(S)$ is given by the table below.

S	$0 - 35$	$36 - 50$	$51 - 74$	$75 - 86$	$87 - 100$
$G = h(S)$	E	D	C	B	A

For example, if you get a score between 0 and 35, you get an E grade.

a. [5 points] Find a formula for the function f written as a piecewise defined function.

$$f(t) = \begin{cases} \underline{\hspace{3cm}} & \underline{\hspace{3cm}} \\ \\ \underline{\hspace{3cm}} & \underline{\hspace{3cm}} \end{cases}$$

b. [2 points] What is the minimum amount of time you need to spend studying to get an A in the midterm? Include units and your answer must be exact or accurate up to 2 decimal places.

Answer: \underline{\hspace{3cm}}

c. [2 points] Give a practical interpretation of the statement $h(f(6)) = $ C. Use complete sentences in your answer.