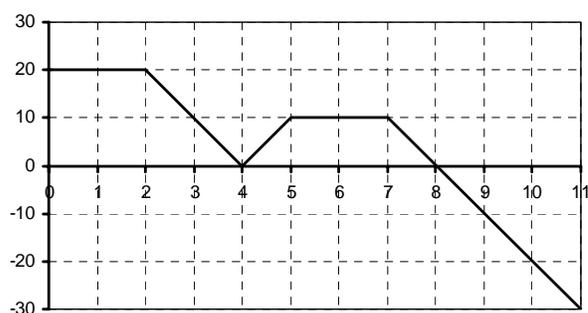


Use the graph of $f(x)$ shown below to answer the following:



1. Find $\int_0^3 f(x)dx$. Include units and an illustration of this quantity on the graph above.

2. Complete this table:

b	0	1	2	3	4	5	6	7	8	9	10
$\int_0^b f(x)dx$											

3. If $F(x)$ is a function such that $F(0) = 0$ and $F'(x) = f(x)$, find the intervals where $F(x)$ is:

increasing _____

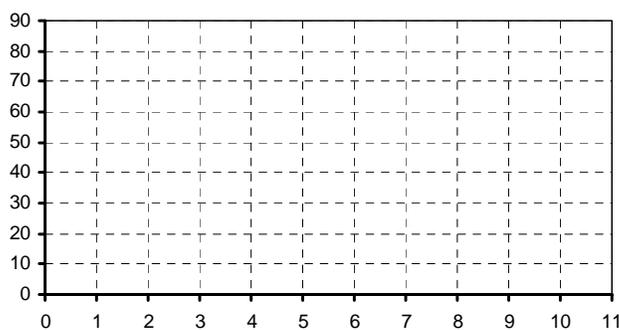
concave up _____

decreasing _____

concave down _____

linear _____

4. Use the information in parts 2 and 3 to sketch an accurate graph of $F(x)$.



5. How would your graph of $F(x)$ change if $F(0) = 2$ instead?