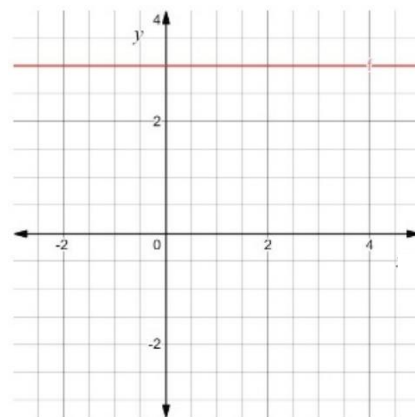


1. Let $F(x) = \int_0^x f(t)dt$, where the graph of f is shown below. Complete the following chart.

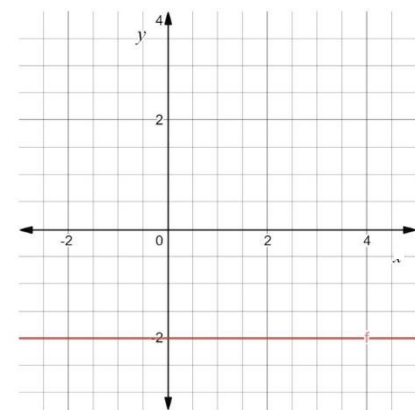
x	-2	-1	0	1	2	3	4
F(x)							



- On what interval is f positive?
- On what interval, if any, is f negative?
- On what interval is $F(x)$ increasing?
- On what interval, if any, is $F(x)$ decreasing?

2. Let $F(x) = \int_2^x f(t)dt$, where the graph of f is shown below. Complete the following chart.

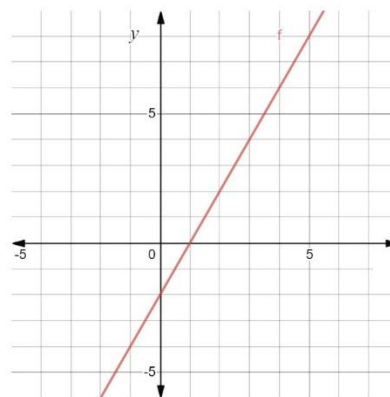
x	-2	-1	0	1	2	3	4
F(x)							



- On what interval, if any, is f positive?
- On what interval, if any, is f negative?
- On what interval, if any, is $F(x)$ increasing?
- On what interval, if any, is $F(x)$ decreasing?

3. Let $F(x) = \int_0^x f(t)dt$, where the graph of f is shown below. Complete the following chart.

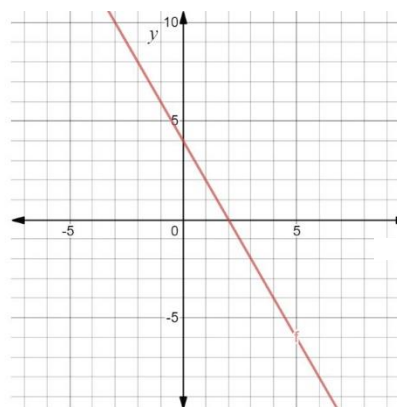
x	-2	-1	0	1	2	3	4
F(x)							



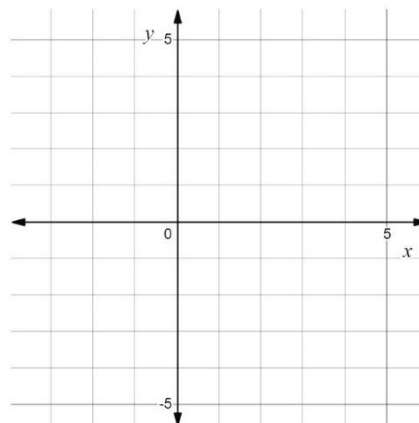
- On what interval is f positive?
- On what interval, if any, is f negative?
- On what interval is $F(x)$ increasing?
- On what interval, if any, is $F(x)$ decreasing?

4. Let $F(x) = \int_0^x f(t)dt$, where the graph of f is shown below. Complete the following chart.

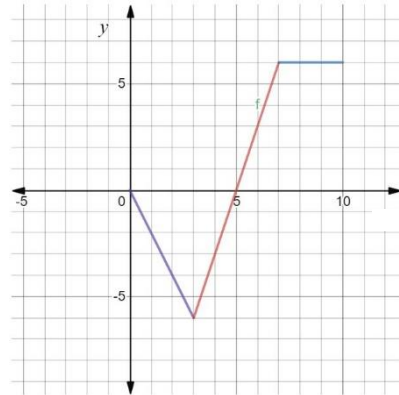
x	-1	0	1	2	3	4	5
F(x)							



- On what interval is f positive?
- On what interval, if any, is f negative?
- On what interval is $F(x)$ increasing?
- On what interval, if any, is $F(x)$ decreasing?
- Plot the points $(x, F(x))$ on the graph provided.
- What is the relationship between f and F ?



5. Let $F(x) = \int_0^x f(t)dt$, where the graph of f is shown below. Complete the following chart.



x	-1	0	1	2	3	4	5	6	7	8	9	10
F(x)												

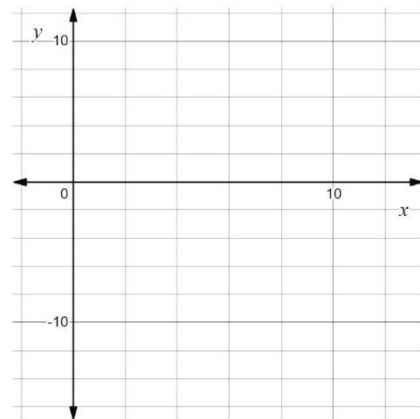
a. On what interval is f positive?

b. On what interval, if any, is f negative?

c. On what interval is $F(x)$ increasing?

d. On what interval, if any, is $F(x)$ decreasing?

e. Plot the points $(x, F(x))$ on the graph provided.



f. On what interval is f decreasing?

g. On what interval is f increasing?

h. On what interval is the graph of F concave down?

i. On what interval is the graph of F concave up?