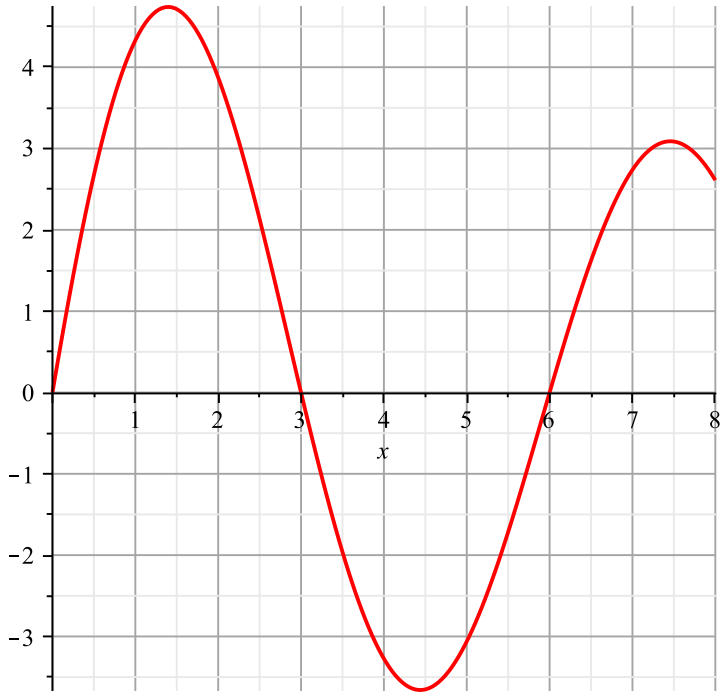
Let $F(x) = \int_1^x f(t)\,dt$ where $f(t)$ is the function graphed below.

1. Where is F increasing? decreasing?
2. Where does F have a local max? a local min?
3. Is F concave up or concave down at $x = 3$?
4. Determine if the following values are positive or negative:
   $F(3)$, $F(4)$, $F(0)$, $F(1)$, $F(6) - F(3)$
5. Write the equation of the line tangent to $y = F(x)$ at $x = 1$.



Graph of y=f(t)