

8. [6 points] Suppose that  $f$  is a continuous, **odd** function, and define another function  $F$  by

$$F(x) = \int_{-12}^x f(3t - c) dt,$$

where  $c$  is some constant. You do not need to show your work for this problem.

- a. [3 points] Find a value of  $c$  for which the graph of  $F$  goes through the origin.

Solution: The correct value is  $c = -18$ .

- b. [3 points] Find a value of  $c$  for which the graph of  $F'$  goes through the origin.

Solution: The correct value is  $c = 0$ .