

You will have at least 15 minutes to complete the quiz. No calculators are allowed.

1. [2 pts each] Decide if the following functions are even, odd, or neither.

(a)  $f(x) = (x^3 - x)^5$  **Odd**

(c)  $r(t) = t^5 + 1$  **Neither**

(b)  $g(x) = e^{x^2}$  **Even**

(d)  $c(t) = e^{3t} + e^{-3t}$  **Even**

2. [2 pts each] Suppose  $(2, 9)$  is a point on the graph of  $f(x)$ .

(a) Find a point on the graph of  $f(x - 2)$ .  
 **$(4, 9)$**

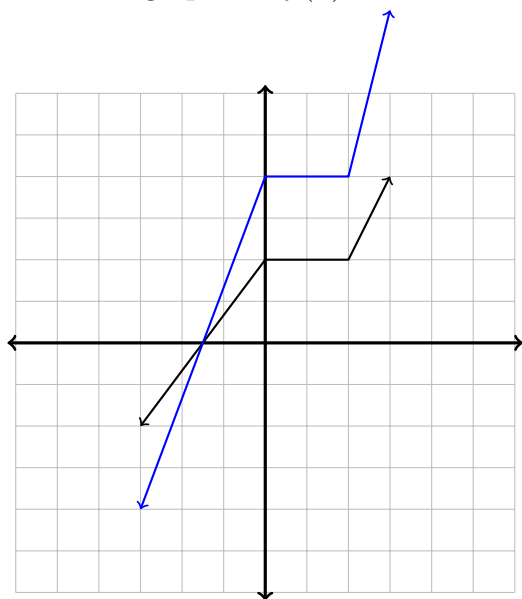
(c) Find a point on the graph of  $-f(x)$ .  
 **$(2, -9)$**

(b) Find a point on the graph of  $\frac{2}{3}f(x)$ .  
 **$(2, 6)$**

(d) Find a point on the graph of  $f(\frac{2}{3}x)$ .  
 **$(3, 9)$**

3. [2 pts each] Given below is the graph of  $f(x)$ .

(a) Draw the graph of  $2f(x)$ .



(b) Draw the graph of  $f(2x)$ .

