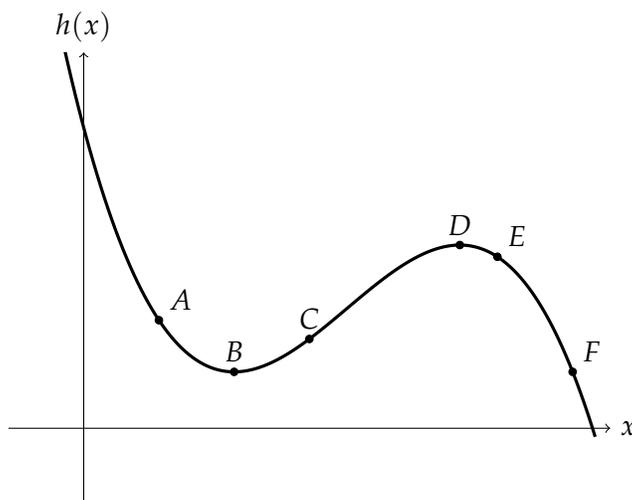


Quiz #4: Monday, Oct 10

Name: _____ Solution Key _____

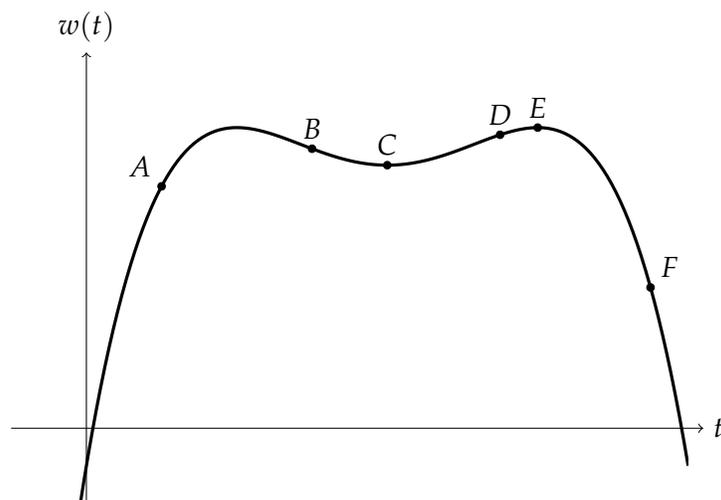
Recitation R02 (M)

Below is the graph of a function $h(x)$, labeled with points A through F .At which of these points is $h'(x)$ positive? _____ C _____At which of these points is $h'(x)$ negative? _____ A, E, F _____At which of these points is $h'(x) = 0$? _____ B, D _____

Quiz #4: Monday, Oct 10

Name: _____ Solution Key _____

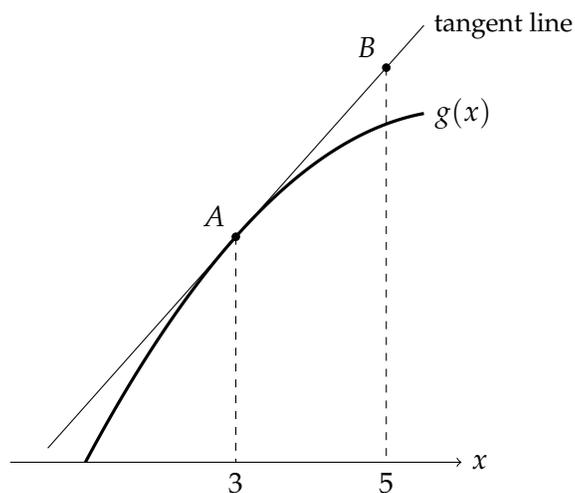
Recitation R02 (M)

Below is the graph of a function $w(t)$, labeled with points A through F .At which of these points is $w'(t)$ positive? A, D At which of these points is $w'(t)$ negative? B, F At which of these points is $w'(t) = 0$? C, E

Quiz #4: Tuesday, Oct 11

Name: _____ Solution Key _____

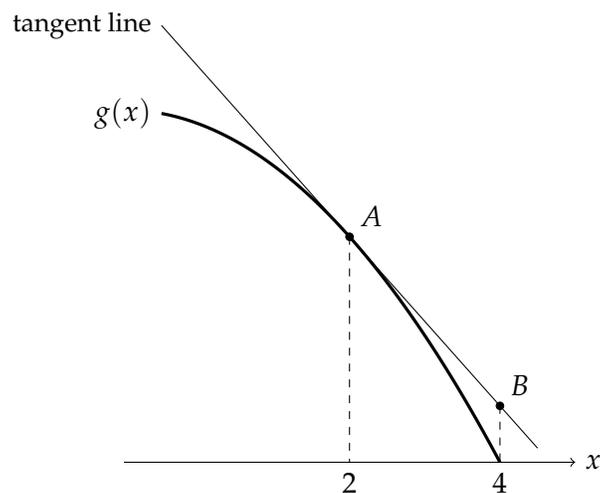
Recitation R04 (Tu)

The function $g(x)$ shown below has $g(3) = 4$ and $g'(3) = 2$.What are the x and y coordinates of point A ? _____ (3,4) _____What are the x and y coordinates of point B ? _____ (5,8) _____

Quiz #4: Tuesday, Oct 11

Name: _____ Solution Key _____

Recitation R04 (Tu)

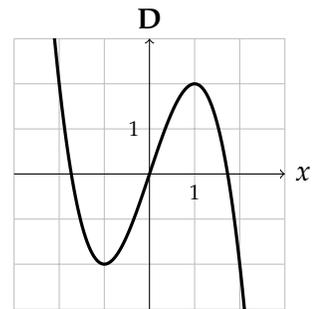
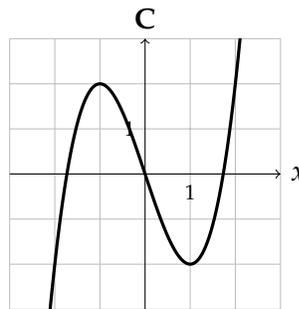
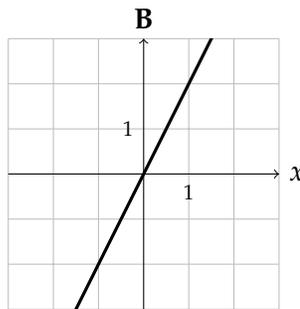
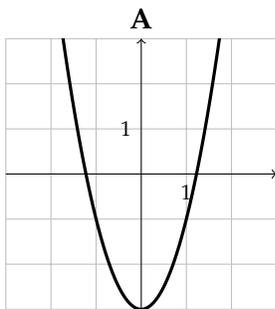
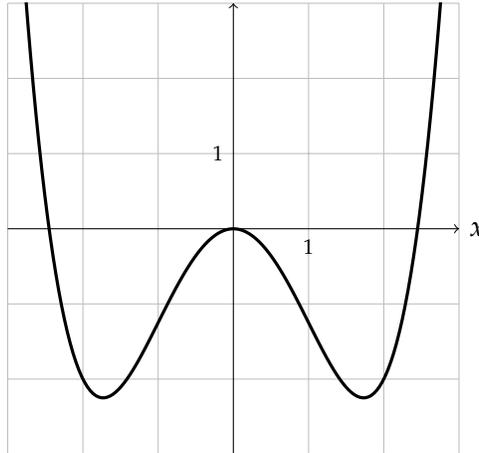
The function $g(x)$ shown below has $g(2) = 9$ and $g'(2) = -3$.What are the x and y coordinates of point A ? _____ (2, 9) _____What are the x and y coordinates of point B ? _____ (4, 3) _____

Quiz #4: Wednesday, Oct 12

Name: _____ Solution Key _____

Recitation R03 (W)

Below is the graph of a function $w(x)$:



Which graph above is that of its derivative function, $w'(x)$? **C**

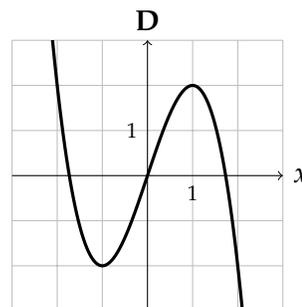
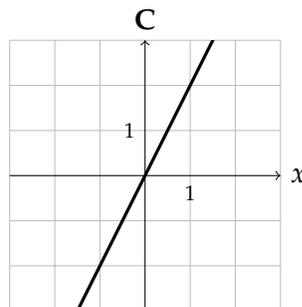
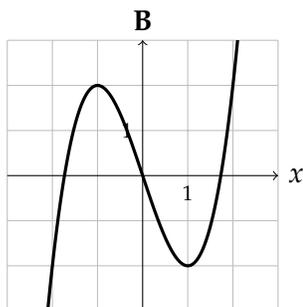
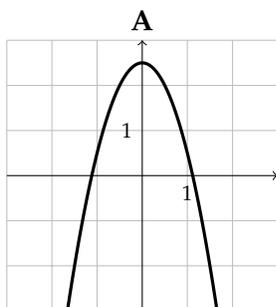
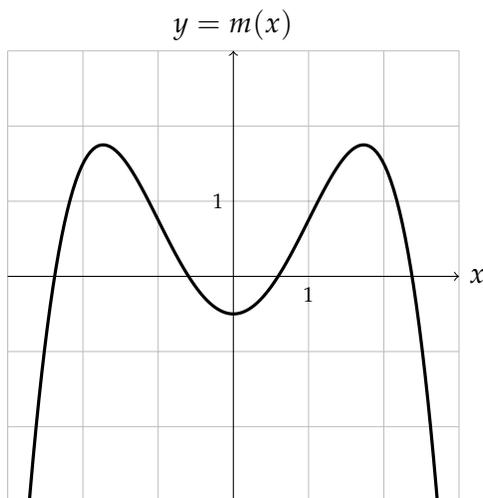
Explain your choice: $w(x)$ has three horizontal tangents, at $x = 0$, $x \approx 1.7$, and $x \approx -1.7$. Only **C** and **D** have zeroes there. From there, we check the sign of the derivative: between $x \approx 1.7$ and $x = 0$, $w(x)$ is increasing, so $w'(x)$ must be positive. Only **C** matches this, and it agrees with the expected signs in the remaining regions as well.

Quiz #4: Wednesday, Oct 12

Name: _____ Solution Key _____

Recitation R03 (W)

Below is the graph of a function $m(x)$:



Which graph above is that of its derivative function, $m'(x)$? **D**

Explain your choice: $w(x)$ has three horizontal tangents, at $x = 0$, $x \approx 1.7$, and $x \approx -1.7$. Only **B** and **D** have zeroes there. From there, we check the sign of the derivative: between $x \approx 1.7$ and $x = 0$, $w(x)$ is decreasing, so $w'(x)$ must be negative. Only **D** matches this, and it agrees with the expected signs in the remaining regions as well.