

Answer on Question # 42244 - Math - Calculus

Estimate graphically the local maximum and local minimum of $f(x) = 4x^2 + 3x + 2$.

- Local maximum: $(-0.4, 1.44)$; local minimum: $(0, -0.37)$

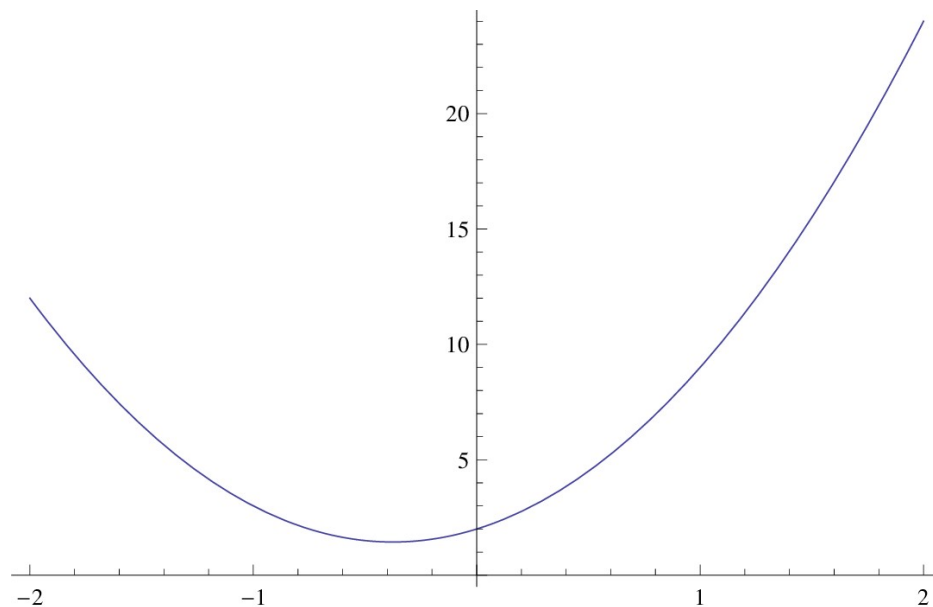
- Local maximum: $(-0.4, 1.44)$; no local minimum

-No local maximum; local minimum: $(-0.4, 1.44)$

-No local maximum; local minimum: $(0, -0.37)$

How can you find the local minimum and maximum?

Solution.



One might see from the graph, that function has one local minimum and no local maximums. The local minimum is situated at $x = -0.4$. Thus, $f(-0.4) = 4 \cdot (-0.4)^2 - 3 \cdot 0.4 + 2 = 1.44$.

The answer is

No local maximum; local minimum: $(-0.4, 1.44)$