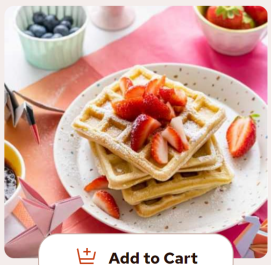
localhost:4173

Desserts

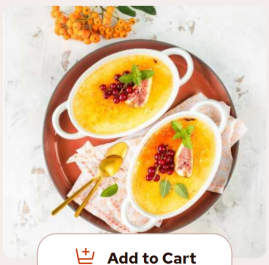


Add to Cart

Waffle

Waffle with Berries

$6.50

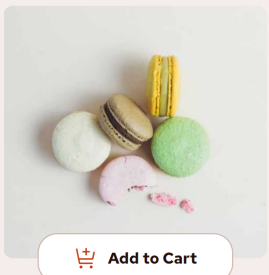


Add to Cart

Crème Brûlée

Vanilla Bean Crème Brûlée

$7.00



Add to Cart

Macaron

Macaron Mix of Five

$8.00

Your Cart (0)

Your added items will appear here

Quiz (5m)

Investigate if $f(x) = \begin{cases} 2x+3 \,;\, x \leq 2 \\ x^2 - 2x \,;\, 2 < x < 4 \\ 12 \,;\, x \geq 4 \end{cases}$ is continuous and differentiable.

For $x=2$:

S1: $f(2) = 2(2)+3 = 7$ (defined)

S2: $\lim_{x \to 2^-}(2x+3) = 7$, $\lim_{x \to 2^+}(x^2-2x) = 0$ $\}\neq$

$\lim_{x \to 2} f(x) \nexists$

$\therefore f(x)$ is NOT cont. & NOT diff at $x=2$

For $x=4$:

S1: $f(4) = 12$ (defined)

S2: $\lim_{x \to 4^-} x^2-2x = 8$, $\lim_{x \to 4^+} 12 = 12$ $\}\neq$

$\lim_{x \to 4} f(x) \nexists$

$\therefore f(x)$ is NOT cont. & NOT diff. at $x=4$