

CORRECTION DU TEST N°5 SA

$$f_1(x) = x^4 + 4x^3 - 3x^2 - 7x + 6$$

$$f_1'(x) = 4x^3 + 12x^2 - 6x - 7$$

$$f_2(x) = \frac{2}{3}x^3 - \frac{1}{4}x^2 + x - \frac{5}{2}$$

$$f_2'(x) = 2x^2 - \frac{1}{2}x + 1$$

$$f_3(x) = (3x - 8)^4$$

$$f_3'(x) = 12(3x - 8)^3$$

$$f_4(x) = (5 - \sqrt{x})^3$$

$$f_4'(x) = \frac{-3(5 - \sqrt{x})^2}{2\sqrt{x}}$$

$$f_5(x) = (4x + 1)(3x - 2)$$

$$f_5'(x) = 24x - 5$$

$$f_6(x) = \frac{1}{4x^2} - \frac{1}{15x^3}$$

$$f_6'(x) = -\frac{1}{2x^3} + \frac{1}{5x^4}$$

$$f_7(x) = \frac{1}{6 - 5x^2}$$

$$f_7'(x) = \frac{10x}{(6 - 5x^2)^2}$$

$$f_8(x) = (2x - 3)\sqrt{x}$$

$$f_8'(x) = \frac{3(2x - 1)}{2\sqrt{x}}$$

$$f_9(x) = \frac{2x - 3}{5x + 1}$$

$$f_9'(x) = \frac{17}{(5x + 1)^2}$$

CORRECTION DU TEST N°5 SB

$$f_1(x) = x^4 - 5x^3 + 4x^2 + 9x - 8$$

$$f_1'(x) = 4x^3 - 15x^2 + 8x + 9$$

$$f_2(x) = \frac{1}{3}x^3 + \frac{5}{6}x^2 - x + \frac{7}{4}$$

$$f_2'(x) = x^2 + \frac{5}{3}x - 1$$

$$f_3(x) = (2x - 7)^3$$

$$f_3'(x) = 6(2x - 7)^2$$

$$f_4(x) = (6 - \sqrt{x})^4$$

$$f_4'(x) = \frac{-2(6 - \sqrt{x})^3}{\sqrt{x}}$$

$$f_5(x) = (3x + 5)(4x - 1)$$

$$f_5'(x) = 24x + 17$$

$$f_6(x) = \frac{1}{6x^3} - \frac{1}{4x^2}$$

$$f_6'(x) = -\frac{1}{2x^4} + \frac{1}{2x^3}$$

$$f_7(x) = \frac{1}{8 - 3x^2}$$

$$f_7'(x) = \frac{6x}{(8 - 3x^2)^2}$$

$$f_8(x) = (4x - 5)\sqrt{x}$$

$$f_8'(x) = \frac{12x - 5}{2\sqrt{x}}$$

$$f_9(x) = \frac{3x - 2}{4x + 1}$$

$$f_9'(x) = \frac{11}{(4x + 1)^2}$$