

Dériver les fonctions suivantes :

$f(x) = \frac{2x+3}{x^2}$	$f(x) = \frac{x^2+2x+1}{2x}$	$f(x) = \sqrt{3x+2}$
$f(x) = (3x^2+2x+1)^3$	$f(x) = \frac{(x^3+x^2)^4}{4}$	$f(x) = \sqrt{x} + \frac{x^3}{3} + \frac{x^2}{2} + \frac{1}{x}$
$f(x) = \frac{(x+1)\sqrt{x}}{x}$	$f(x) = (x^2+2x) \times (x^3+2x^2+x)$	$f(x) = \frac{1}{(5x^2+2x)}$

Correction :

$f'(x) = \frac{2(-x-3)}{x^3}$	$f'(x) = \frac{(x^2-1)}{(2x^2)}$	$f'(x) = \frac{3}{2\sqrt{3x+2}}$
$f'(x) = 6(3x+1)(3x^2+2x+1)^2$	$f'(x) = (3x^2+2x)(x^3+x^2)^3$	$f'(x) = \frac{1}{2}\sqrt{x} + x^2 + x - \frac{1}{x^2}$
$f'(x) = \frac{(x-1)\sqrt{x}}{2x^2}$	$f'(x) = 5x^4 + 16x^3 + 15x^2 + 4x$	$f'(x) = -2 \frac{(5x+1)}{(5x^2+2x)^2}$