

10	A function f with domain $x > 0$ is such that $f'(x) = 8(2x-3)^{\frac{1}{3}} - 10x^{\frac{2}{3}}$. It is given that the curve with equation $y = f(x)$ passes through the point $(1, 0)$.	
	(a)	Find the equation of the normal to the curve at the point $(1, 0)$. [3]
	(b)	Find $f(x)$. [4]

DO NOT WRITE IN THIS MARGIN



It is given that the equation f'(x) = 0 can be expressed in the form

 $125x^2 - 128x + 192 = 0.$

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(c)	Determine, making your reasoning clear, whether f is an increasing function, a decreasing function or neither. $[3$