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Part time maths Friday afternoons

maths Exam 1 06/11/2020 @ 1330.

Question 1

Vii) $y = \sqrt{3x^3 + 2x + 5}$

$$\frac{dy}{dx} = \sqrt{9x^2 + 2 \times (1 + 0)}$$

$$= \sqrt{9x^2 + 2}$$

=

b) 3rd derivative $y = \sin x$.

$$\frac{du}{dx} = \sin x$$

$$= \cos x \times \frac{d}{dx}$$

$$\cos x \times 1 = \cos x$$

4 second order partial derivatives

c) $z = 5x^3y^2 + 3x^2 + 4y^4$