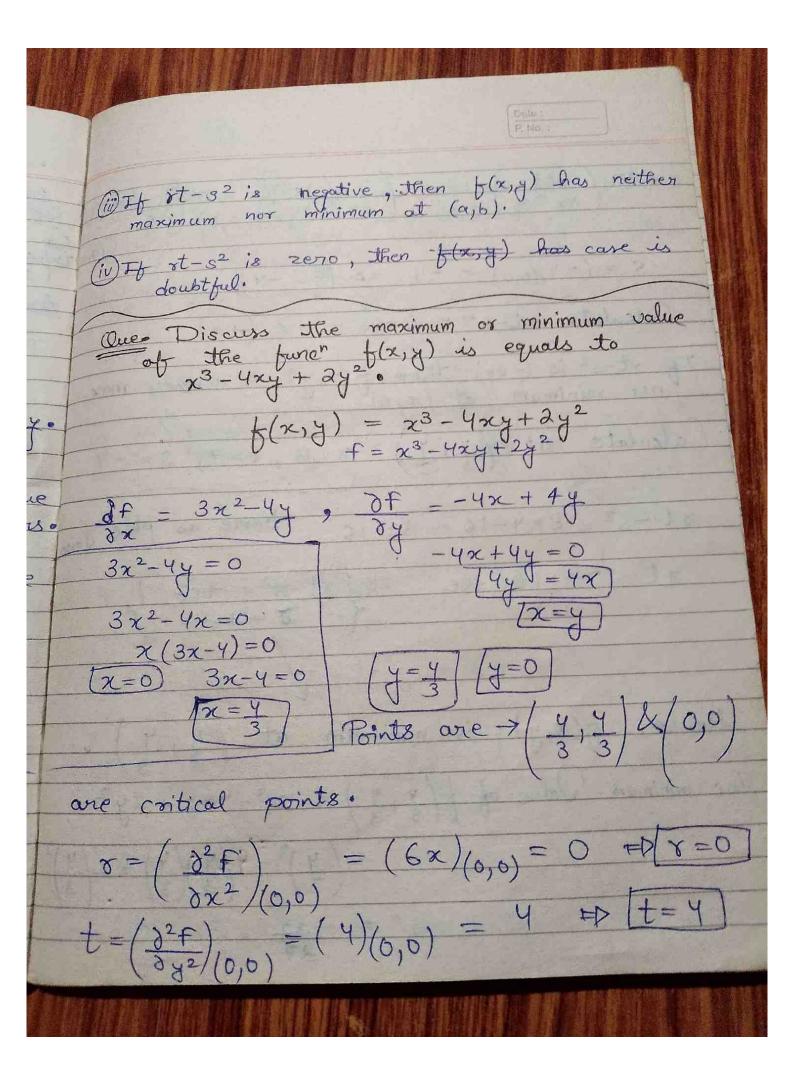
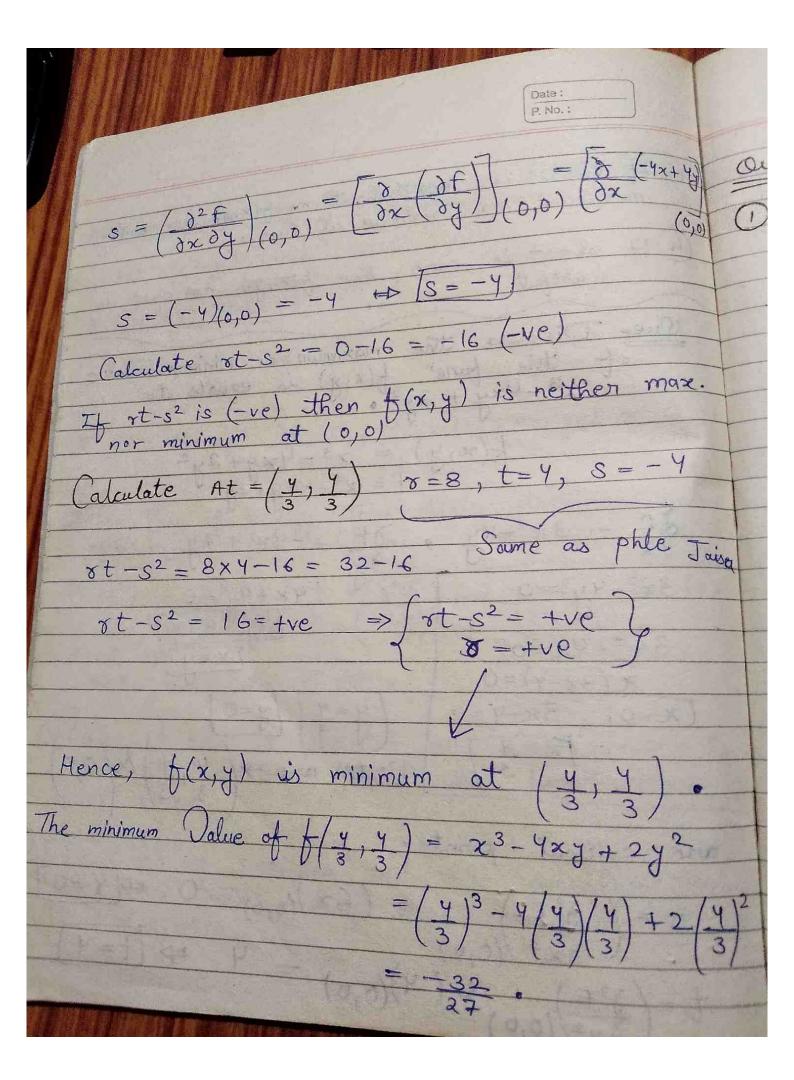
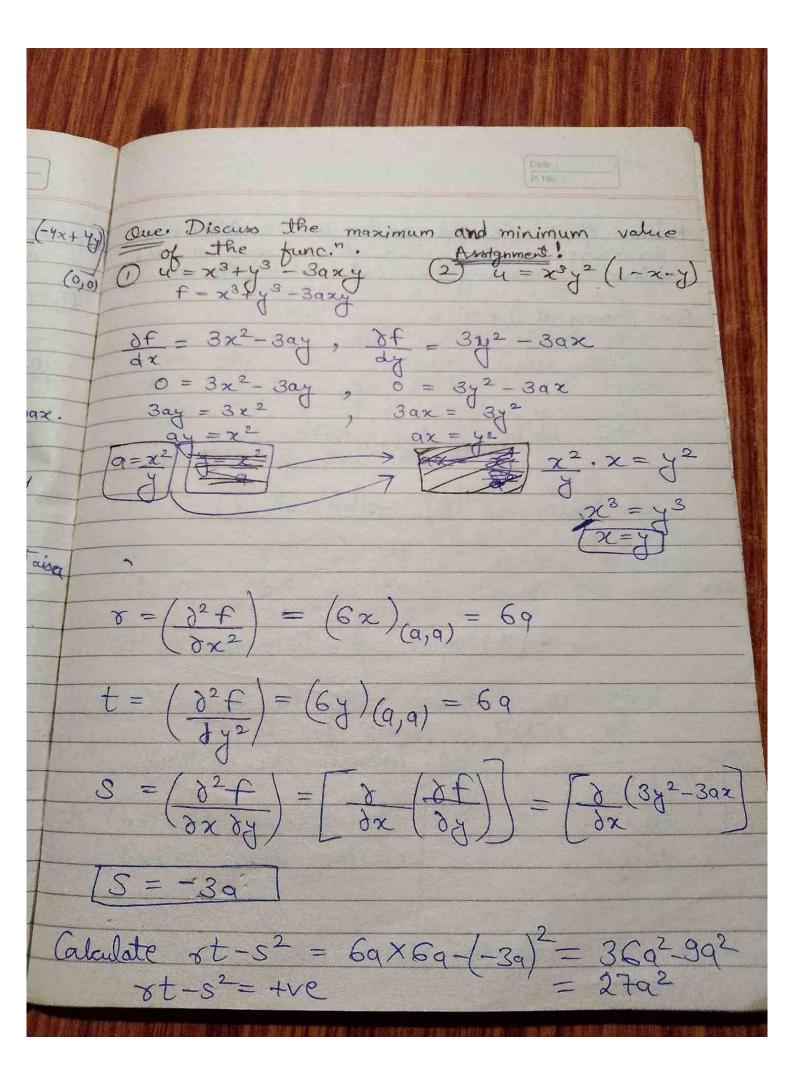


Agrigament of (x+	
Taylor's theorem $f(a+h) = f(a) + h f'(a) + h^2 f''(a) + h$	Singuificant to 4 digits.
$a = \overline{\Lambda}, h = \chi$ $f(x + \overline{\Lambda}) = \tan(x + \overline{\Lambda})$ $f(x) = \tan \chi$ $f(a) = \tan \alpha$ $f(\overline{\Lambda}) = \tan(\overline{\Lambda}) = 1$	put $x = 1.5$ $tan(46.5^{\circ}) = 1+$ 2(1.5) $+2(1.5)^{2}$ $+3(1.5)^{3}$
$f(x) = \sec^2 x$ $f'(\overline{x}) = \sec^2 (\overline{x})$ $f'(\overline{x}) = (2)^2 = 4$	tan(46.5) = 1.0537

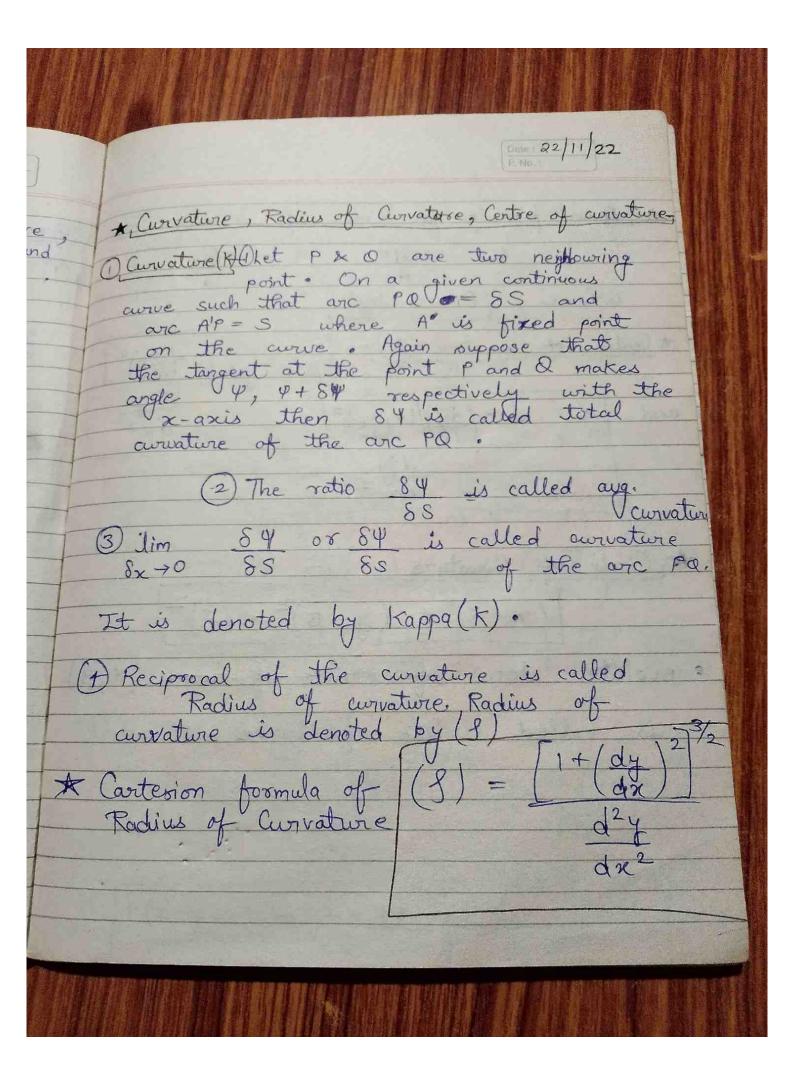
* Maxima - Minima of June of two variables * Working Rule >> 1) Find of and of o (2) Solve the ego of =0, of =0, we get x &y. The Pair of x & y thus obtain stationary value of f(x,y). Let (a,b) be one of these pairs Find $r = \left(\frac{\partial^2 f}{\partial x^2}\right)$, $t = \left(\frac{\partial^2 f}{\partial y^2}\right)$, $s = \left(\frac{\partial^2 f}{\partial x^2}\right)$ at the point (a,b). FOIT $rt-S^2$ is positive and r is greater to than to 0, then f(x,y) has fur minimum at (q,b). If st-s2 is positive and y is smaller that to 0, then f(x,y) has maximum at

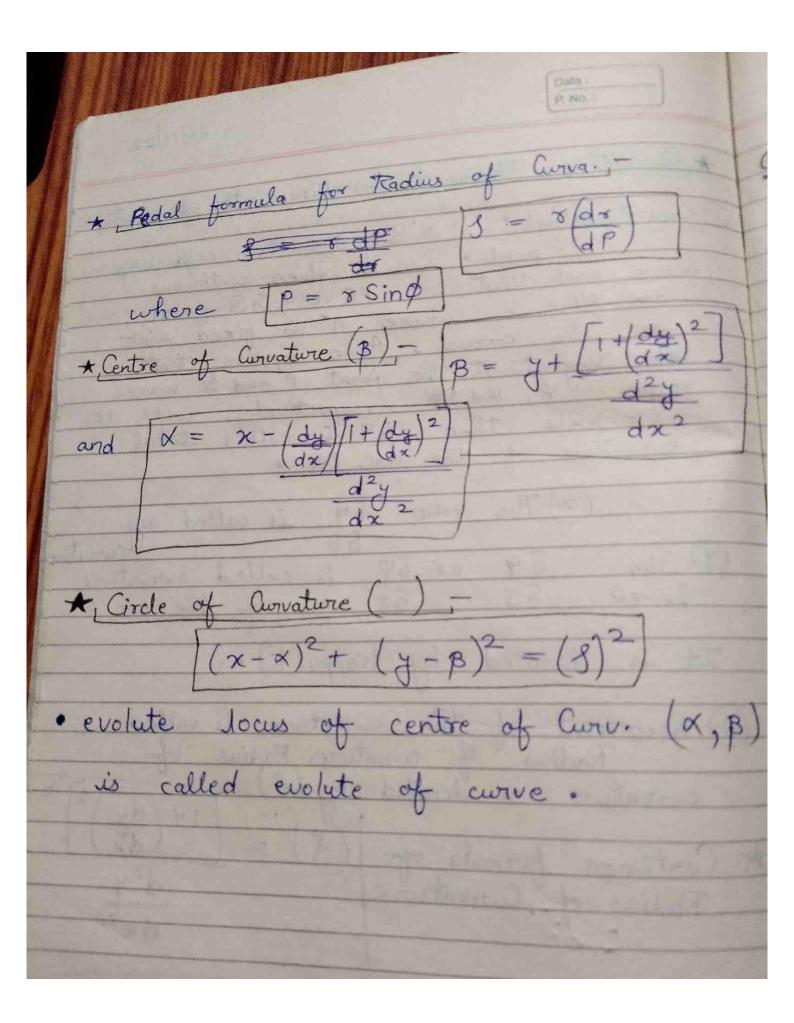


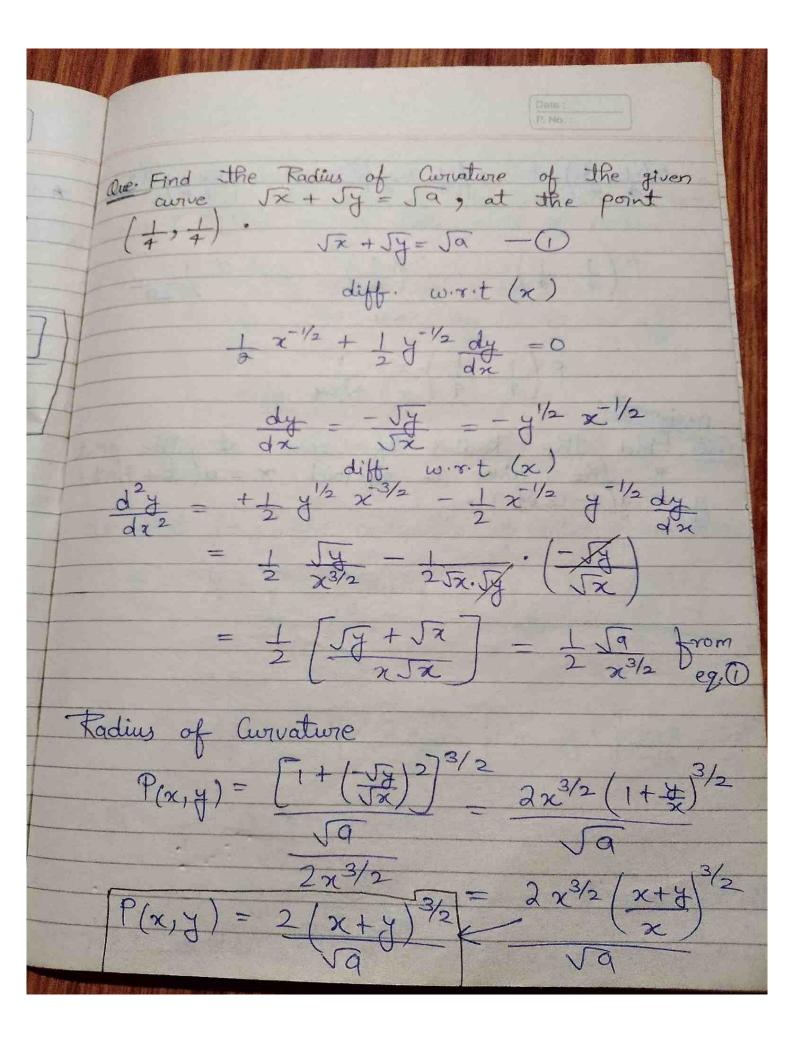


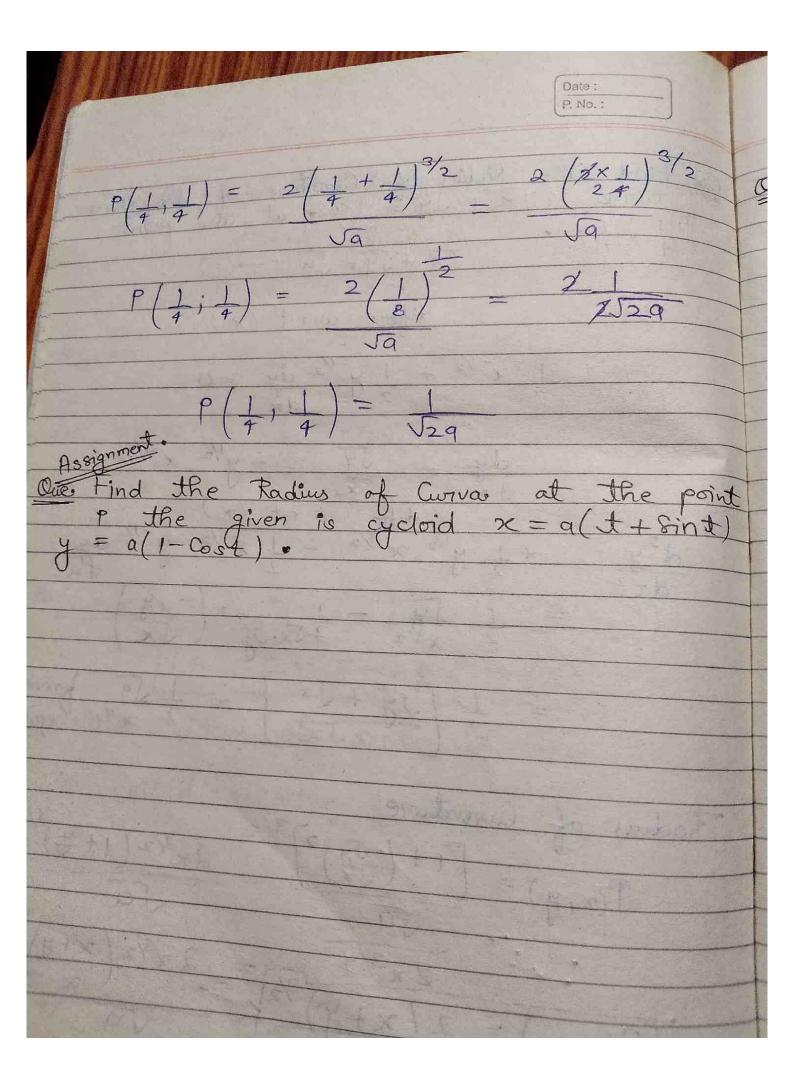


Date: P. No. : Hence $st-s^2$ is the and sister -ve (b) the have maximum and according as (9) . We have maximum and minimum according as (9) is -ve (8) the









one Find the coordinates of the centre of curvature for the point (x, y) on the Parabola y= +ax and also find eq. of the evolute of parabola. Here you tax ()

ay dy = 4a => dy = 3 diff. wirt (x) At point (x, y) the coordinates of Centre of curvature $\beta = y + (x+9) \times 2x^{1/2}$ $\beta = -\sqrt{9}y + 2x^{3/2} + 2x^{1/2}q = -\sqrt{9}\sqrt{9}x + 2x^{3/2} + 2x^{1/2}q$

