

$$(b) \quad g = \frac{x}{z^*} c. \quad \text{whetecisaconstanl}$$

$$e) \quad y = \ln Ez + rt - \ln(t - y)$$

$$\sqrt[6]{z^2} \cdot az + 3 \cdot \frac{1}{x+5}$$

$$L1 \quad \frac{1}{2} \cdot \frac{q}{t} + L$$

$$ga(q' + c) \cdot Wtc$$

$$2'rc$$

. (10pts) Let, C be the curve defined by the equation

$$t^2 + 2r^9 - 1 = 0$$

(a) Show that the curve C passes through the point P(1,0)

Assume the curve C determines an implicit function $y = y(r)$ near P.

(b) Find $\frac{dy}{dr}$ at P

(c) Find the equation of the tangent line to the curve C at the point P.

Find $\frac{dy}{dr}$ at P

a) $y'(r) = -\frac{f_r}{f_t}$

$$2r$$

$$y'(1) = -\frac{f_r}{f_t}$$

$$L$$

$$y'(1) = -\frac{f_r}{f_t}$$

$$y'(1) = -\frac{f_r}{f_t}$$

b)

$$y'(1) = -\frac{f_r}{f_t}$$

$$y'(1) = -\frac{f_r}{f_t}$$

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-; fl- f"-r) l, ^" j*1' J*1' 40 curve "{ /G),
 .1.,r l,ur, " ^' ^L"r" w)u(u- t
 &tnc.^ve r'-^un) l, [n) ,lyh- rt,o,* } y',(nt,
 +1 j]rJ l, * l, [n) ,lyh- rt,o,* } y',(nt,
 *Lil, l'U) <0

$$r) \quad ,il.J,* \quad |J. \quad ,^{-1} \quad ^{\wedge}Z \quad ,^{-1} \quad ,,,Y$$
$$\begin{array}{l} z \text{ tt} \\ 4 > 8 \\ r \text{ 1[} \\ q > e \end{array}$$

