2) a) $y = x^4 + x$, em R^2

$r(t) = (t, t^4 + t)$, $t \in R$

b) $x^2 + y^2 = 16$ no plano $z = 0$ em R^3

$r(t) = (4\cos t, 4 \operatorname{sen} t, 0)$

3) $\lim_{t \to 0^+} r(t) = \left(\sqrt{t+1}, e^t, \frac{1}{t} \right)$

$\lim_{t \to 0^+} r(t) = \left(\lim_{t \to 0^+} \sqrt{t+1}, \lim_{t \to 0^+} e^t, \lim_{t \to 0^+} \frac{1}{t} \right)$

$= (1, 1, +\infty)$

4 $\int r(t)\, dt$ para $r(t) = (\cos t, t, 2e^t)$ $t \in R$.

$\int r(t)\, dt = \left(\operatorname{sen} t, \frac{t^2}{2}, 2e^t \right) + C$

5) a) $r(t) = (t^3, t^2, t+1)$ $t \in [0, 2]$

$r(0) = (0, 0, 1)$

b) $r'(t)$ = vetor velocidade

$r'(t) = (3t^2, 2t, 1)$