Colegio seminario diosesano de Duitama
Área: Informática
Fechas: 12/06/2021

Calculo de Thomas ,sección de ejercicios 3.3

(E.34.)

$$s = \frac{t^2+5t-1}{t^2}$$

Solución:

$$s = \frac{t^2 + 5t - 1}{t^2}$$
$$s' = \frac{(t^2)(t^2+5t-1)' - (t^2+5t-1)(t^2)'}{(t^2)^2}$$
$$s' = \frac{(t^2)(2t+5) - (t^2+5t-1)(2t)}{t^4}$$
$$s' = \frac{2t^3+5t^2-2t^3-10t^2+2t}{t^4}$$
$$s' = \frac{-5t^2+2t}{t^4}$$
$$s' = \frac{t(-5t+2)}{t^4}$$
$$s' = \frac{-5t+2}{t^3}$$
$$s'' = \frac{t^3(-5t+2)' - (-5t+2)(t^3)'}{(t^3)^2}$$
$$s'' = \frac{t^3(-5) - (-5t+2)(3t^2)}{t^6}$$
$$s'' = \frac{-5t^3+15t^3-6t^2}{t^6}$$
$$s'' = \frac{10t^3-6t^2}{t^6}$$
$$s'' = \frac{t^2(10t-6)}{t^6}$$
$$s'' = \frac{10t-6}{t^4}$$

Link del archivo fuente
https://docs.google.com/document/d/1ahwCLoLcDPWJJeocxljK1XiqJqRsGz4Ghd5RtZK4JSI/edit?usp=sharing

Referencias del trabajo
Hass, J., Heil, C., Weir, M.D. (Eds.), 2018. Thomas' calculus, Fourteenth edition. ed. Pearson, Boston.