

Answer on Question #73848 – Math – Calculus

Question

Write $y=t+6/t$ and $x=6/(t)(1/2)$ in rectangular form?

Solution

$$y = t + \frac{6}{t}, \quad x = \frac{6}{(t)\left(\frac{1}{2}\right)}$$

$$x = \frac{6}{(t)\left(\frac{1}{2}\right)} = \frac{12}{t} \rightarrow t = \frac{12}{x}$$

$$y = \frac{12}{x} + \frac{6x}{12} = \frac{24 + x^2}{2x}$$

Answer:

$$y = \frac{24 + x^2}{2x}$$