- $\frac{dy}{dx} = \frac{y}{x - \sqrt{xy}}$

- USING SUBSTITUTION!

→ LET $v \equiv xy \therefore y = \frac{v}{x} \Rightarrow \frac{dy}{dx} = \frac{x\left(\frac{dv}{dx}\right) - v}{x^2}$

- THE D.E. BECOMES!

→ $x\frac{dv}{dx} - v = \frac{xv}{x - \sqrt{v}}$

→ $x\frac{dv}{dx} = \frac{xv + v(x - \sqrt{v})}{x - \sqrt{v}}$

→ $x\frac{dv}{dx} = \frac{2xv - v^{3/2}}{x - \sqrt{v}}$

→ $x\frac{dv}{dx} = v\frac{(2x - \sqrt{v})}{x - \sqrt{v}}$

???

THIS LOOKED PROMISING AT FIRST, NO LUCK!

WHERE AM I GOING WRONG?

! THANKS !