



$$y^2 = 4x$$

$$t = y^2 \Rightarrow y = \sqrt{t}$$

$$t = 4x \Rightarrow x = \frac{t}{4}$$

Equation of straight line:

$$\frac{y-0}{x-1} = \frac{\sqrt{t}-0}{\frac{t}{4}-1}$$

$$\frac{y}{x-1} = \frac{4\sqrt{t}}{t-4}$$

$$y = \frac{4\sqrt{t}(x-1)}{t-4}$$

(arrange into  $y = mx + c$  doesn't seem to help)

Not sure how to get a set of 2 points that correspond to each other? is it  $t = 3$  pair with  $-\frac{1}{3}$ ?

$$yt - 4y = 4\sqrt{t}(x-1)$$

$$1 + \frac{y(t-4)}{4\sqrt{t}} = x$$

So I get two points and find mid pt.  
by  $\frac{y_1 + y_2}{2}$  and  $\frac{x_1 + x_2}{2}$  and  
combine the parametric eqn.?