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(b) Find all points (x, y) on the curve where the line tangent to the curve has slope $\frac{1}{2}$.

$$\frac{dy}{dx} = \frac{y}{(2y - x)}$$

$$\frac{y}{(2y - x)} = \frac{1}{2}$$ Set the first derivative equal to ½.

$2y = 2y - x$ Cross multiply

$x = 0$ Subtract 2y from both sides

$y^2 = 2$ Plug in x = 0 to the original equation: $y^2 = 2 + xy$.

$y = \pm\sqrt{2}$ Take the square root of both sides, remember both positive and negative solutions.

$(0, \sqrt{2}), (0, -\sqrt{2})$ Final solution, remember x = 0.