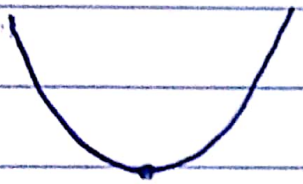
20-P-KM-BK-023

$$a = \frac{v^2}{r}$$



$$y = \frac{x^2}{r}, \quad \rho = \frac{\left(1 + \left(\frac{\partial y}{\partial x}\right)^2\right)^{3/2}}{\frac{d^2y}{dx^2}}$$

$$\frac{\partial y}{\partial x} = \frac{2x}{r}$$

$$\frac{\partial^2 y}{\partial x^2} = \frac{2}{r}$$

$$\rho = \frac{\left(1 + \left(\frac{2x}{r}\right)^2\right)^{3/2}}{2/r}$$

at the bottom, $x = 0$

$$\rho = \frac{1}{2/r} = \frac{r}{2}$$

$$a = \frac{2v^2}{r}$$

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