Given that $cosx = -\frac{\sqrt{7}}{3}$ and $\frac{\pi}{2} \leq x \leq \pi$, find the possible values of $sinx$ and $cotx$

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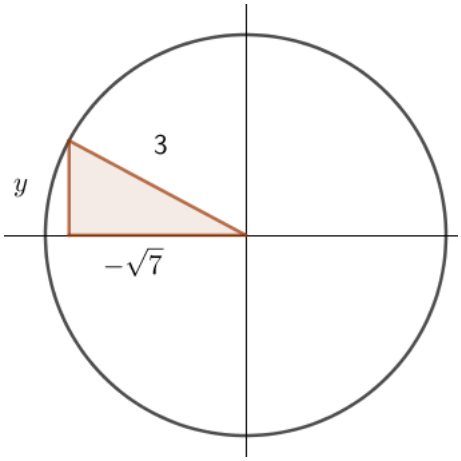
x is in the second quadrant

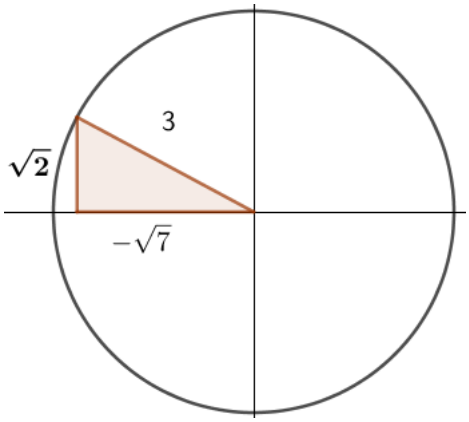


Using Pythagoras' Theorem:

$$y^2 + \left(-\sqrt{7}\right)^2 = 3^2$$

$$y^2 = 9 - 7$$

$$y = \sqrt{2}$$



$$sinx = \frac{\sqrt{2}}{3}$$

$$cotx = \frac{1}{tanx} = \frac{1}{\frac{\sqrt{2}}{-\sqrt{7}}}$$

$$cotx = \frac{-\sqrt{7}}{\sqrt{2}} = \frac{-\sqrt{14}}{2}$$