

F. The turning point of the parabola

$$y = x^2 - 2ax + 1$$

is closest to the origin when

- (a) $a = 0$ (b) $a = \pm 1$ (c) $a = \pm \frac{1}{\sqrt{2}}$ or $a = 0$ (d) $a = \pm \frac{1}{\sqrt{2}}$.