

Example The distance of the point P (1, - 3) from the line $2y - 3x = 4$ is

- (A) 13 (B) $\frac{7}{13}\sqrt{13}$ (C) $\sqrt{13}$ (D) None of these

Solution (A) is the correct answer. The distance of the point P (1, - 3) from the line $2y - 3x - 4 = 0$ is the length of perpendicular from the point to the line which is given by

$$\left| \frac{2(-3) - 3 - 4}{\sqrt{13}} \right| = \sqrt{13}$$