Boxed equation

$$\begin{array}{ccc} \sqrt{4x^2 - 1} &= 0 \\ \Rightarrow & \sqrt{4}\sqrt{x^2} &= 1 \\ \Rightarrow & 2 \left| x \right| &= 1 \\ \Rightarrow & x &= \pm \frac{1}{2} \end{array}$$

The final result is

$$x = \pm \frac{1}{2} \tag{1}$$