Correct. Rewrite the expression as a radical. The denominator of the fraction determines the root of the radical.

$$\left(125m^3\right)^{\frac{1}{3}} = \sqrt[3]{125m^3}$$

Find the cube root of both the coefficient and the variable factor.

$$\sqrt[3]{5^3 \cdot m^3} = \sqrt[3]{5^3} \cdot \sqrt[3]{m^3} = 5m$$