

Correct. Factor the coefficient 4 into $2 \cdot 2$: $\sqrt{2 \cdot 2 \cdot x^8}$

Factor the variable into squares: $\sqrt{2 \cdot 2 \cdot x^2 \cdot x^2 \cdot x^2 \cdot x^2}$

Write $2 \cdot 2$ as 2^2 and separate into individual radicals: $\sqrt{2^2} \cdot \sqrt{x^2} \cdot \sqrt{x^2} \cdot \sqrt{x^2} \cdot \sqrt{x^2}$

Simplify: $2 \cdot |x| \cdot |x| \cdot |x| \cdot |x| = 2x^4$