

Identifying the fifth roots under the radical, you find: $\sqrt[5]{160a^{11}b^{43}c^{17}} = \sqrt[5]{2^5 \cdot 5 \cdot (a^2)^5 \cdot a \cdot (b^8)^5 \cdot b^3 \cdot (c^3)^5 \cdot c^2}$.
This simplifies to $2a^2b^8c^3\sqrt[5]{5ab^3c^2}$.