POWER MAN Mnemonic for exponents:

Power Man is based on the idea that since exponents are smaller than their coefficient counterparts, they can't handle as powerful a mathematical operation. Therefore, whatever operation the problem asks you to do to the coefficient, you must do one level less (or lower) mathematically to the exponents.

Ex. $(3x^4)(2x^5) = 6x^9$
    *multiply coefficients, so add exponents!

Power (roots)
Multiply (divide)
Add (subtract)
Nothing

Ex. $(5x^2)^3 = 125x^6$
    *raise coefficients to a power, so multiply exponents!

Power (roots)
Multiply (divide)
Add (subtract)
Nothing

Ex. $\dfrac{25x^2}{5x} = 5x$
    *divide coefficients, so subtract exponents!

Power (roots)
Multiply (divide)
Add (subtract)
Nothing

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