

Name _____

Power of Products

Simplify by using power of product rule.

1) $(12x^2y^3)^3$ $(1728x^6y^9)$	2) $(3a^3 \cdot ab^5)^7$ $(2187a^{28}b^{35})$
3) $(2b^3 \cdot 5b^2)^4$ $(10000b^{20})$	4) $(5x^5 \cdot 3x^3 \cdot x^4)^2$ $(225x^{24})$
5) $(x^2y^2 \cdot 3xy^2 \cdot 2x^3y^3)^4$ $(1296x^{24}y^{28})$	6) $(2cd^3 \cdot 2c^4)^5$ $(1024c^{25}d^{15})$
7) $(5a^2b \cdot 3ab^4 \cdot 2a^2b^3)^2$ $(900a^{10}b^{16})$	8) $(2yz^3 \cdot 3x^4 \cdot 2y^3z^2)^3$ $(1728x^{12}y^{12}z^{15})$