

Name _____

Power of Products

Simplify by using power of product rule.

1) $(5a^4 \cdot 2a^3)^3$ $(1000a^{21})$	2) $(2d^9 \cdot 3d^2)^4$ $(1296d^{44})$	3) $(4a^3 \cdot 2a^3)^4$ $(4096a^{24})$
4) $(3b^3 \cdot 2b^2)^5$ $(7776b^{25})$	5) $(5c^4 \cdot 4c^5)^2$ $(400c^{18})$	6) $(2c^5 \cdot 2c^3)^4$ $(256c^{32})$
7) $(4x^5 \cdot 3x^4)^3$ $(1728x^{27})$	8) $(4b^3 \cdot 2b^2)^3$ $(512b^{15})$	9) $(x^3 \cdot 3x^2y^3)^5$ $(243x^{25}y^{15})$
10) $(2x \cdot 5xy^3)^2$ $(100x^4y^6)$	11) $(6b^2 \cdot 2b^4)^4$ $(20736b^{32})$	12) $(5a \cdot 2c^2a^4)^3$ $(1000c^6a^{15})$