

Name _____

Power of Products

Simplify the expression. Identify and circle the correct answer

Problem	Option 1	Option 2
1) $(a^2b^4)^2$	(a^4b^8)	(a^8b^8)
2) $(3xy^3)^3$	$(9x^3y^9)$	$(27x^3y^9)$
3) $(pq^4)^5$	(p^5q^4)	(p^5q^{20})
4) $(2u^2v)^4$	$(16u^8v^4)$	$(32u^8v^4)$
5) $(3x^4y^6)^5$	$(243x^{20}y^{20})$	$(243x^{20}y^{30})$
6) $(5ab^4)^3$	$(125a^3b^{12})$	$(25a^3b^{12})$
7) $(2ab)^6$	$(64a^6b^6)$	$(64ab^6)$
8) $(5x^3y^4z^4)^2$	$(25x^6y^8z^4)$	$(25x^6y^8z^8)$
9) $(4a^4b)^4$	$(256a^{16}b^4)$	$(256a^4b^4)$
10) $(3a^4b^2c^3)^3$	$(27a^{12}b^6c^9)$	$(27a^{12}b^2c^9)$