Algebra 1AB

WS 7.1A Exponent Rules-Product Rules

Simplify using the Product of like bases rule. Your answer should contain only positive exponents.

1) $a^3 \cdot 3a^5$

2) $4nn^2 \cdot 5n^2$

3) $5n^3 \cdot n^5 \cdot 6n$

4) $4n^4 \cdot 2n$

5) $6n^3 \cdot 3n^5$

Simplify using the Power to a Power rule. Your answer should contain only positive exponents.
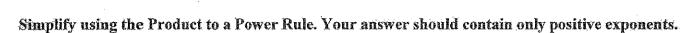
6) $\left(3^4\right)^4$

7) $\left(3^2\right)^3$

8) $\left(2^3\right)^3$

9) $\left(2^4\right)^2$

10) $\left(4^3\right)^3$

Simplify using the Product to a Power Rule. Your answer should contain only positive exponents.

11) $\left(2x^2\right)^5$

12) $\left(4m^5n^3\right)^4$

13) $\left(3yx^5\right)^2$

14) $\left(6x^5y^6\right)^3$

15) $\left(6y^2\right)^5$