

**Multiplying Numbers with Exponents**

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**Simplify. Your answer should contain only positive exponents.**

1)  $3 \cdot 3^0$

2)  $2^2 \cdot 2^2$

3)  $3^3 \cdot 3^2$

4)  $2 \cdot 2^3$

5)  $4a \cdot 2a^4$

6)  $3n^2 \cdot 3n^{-2}$

7)  $2p^{-3} \cdot 3p^4$

8)  $k^0 \cdot 2k^3$

9)  $4x^3 \cdot 2x^3$

10)  $2x^2 \cdot 3x$

11)  $3xy^2 \cdot 2x^0$

12)  $3nm^{-2} \cdot 3m^3n^{-2}$

13)  $2a^{-3} \cdot 2a^{-2}$

14)  $3m^2n^0 \cdot 3m^{-1}n^2$

15)  $2y^0 \cdot 4x^0y^3 \cdot 4x^3y^2$

16)  $4x^3y^0 \cdot y^{-2} \cdot xy^4$

**Simplify. Write each answer in scientific notation.**

17)  $(4.6 \times 10^5)(5.2 \times 10^{-6})$

18)  $(7 \times 10^3)(6.07 \times 10^{-4})$

19)  $(9.5 \times 10^{-2})(7 \times 10^{-3})$

20)  $(2.9 \times 10^1)(7.81 \times 10^{-3})$