

Name: _____ Period: _____ Date: _____

Multiplying Powers with the Same Base Exit Quiz

Evaluate the following expressions.

1. $5ax^2 \times 5a^3x$

2. $2b^3 \times 2^3b^{-7}$

3. $(3a^3b^0)(2a^1b^3)$

4. $(2x^4y)(9xy^{-4})$

5. $(2a^2)(9a^{-5})(5a^0) = 90a^{-3}$

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Answer:

Evaluate the following expressions.

$$1. \quad 5ax^2 \times 5a^3x = 5^2 a^4 x^3 = 25a^4 x^3$$

$$3. \quad (3a^3b^0)(2a^1b^3) = 6a^4b^3$$

$$5. \quad (2a^2)(9a^{-5})(5a^0) = 90a^{-3} = \frac{90}{a^3}$$

$$2. \quad 2b^3 \times 2^3b^{-7} = 2^4b^{-4} = \frac{16}{b^4}$$

$$4. \quad (2x^4y)(9xy^{-4}) = 18x^5y^{-3} = \frac{18x^5}{y^3}$$