

Name _____ Period _____ Date _____

WORKSHEET MULTIPLYING MONOMIALS

Use the property of exponents for multiplication, $x^m \cdot x^n = x^{m+n}$, to multiply two or more monomials. Follow the guidelines below:

- Add the exponents if the bases are same.
- Multiply the numerical coefficients.

EXAMPLES

$$(2x^3)(4x^7) = 8x^{10}$$

$$(-3a^5)(6a) = -18a^6$$

$$(4a^2b^6)(9a^3b^{10}) = 36a^5b^{16}$$

DIRECTIONS: Find the product.

1. $(y^2)(y^4)$

2. $(7a^3)(2a^8)$

3. $(-2a^5)(9a)$

4. $(7ab)(3a^2b^2)$

5. $(8a^3b^2)(-2a^5b)$

6. $(-xy^3)(-3xy)(8xy)$

7. $(3b^4)(7ab)(6a^2b)$

8. $(5a^2b^3)(-3a^2b)(8ab)$