

Test Algebra 1

Name _____

Simplify each.

① $4^7 \cdot 4^5 =$ _____

③ $a^4 \cdot a^6 =$ _____

② $x^7 \cdot x^6 =$ _____

④ $d \cdot d^8 =$ _____

⑤ $(-3)^4 =$ _____

⑥ $-5^2 =$ _____

Simplify each product.

⑦ $(4a^2b)(2a) =$ _____

⑧ $(x^3y^4)(x^4y^2) =$ _____

⑨ $(5a^2)(4a^3) =$ _____

⑩ $(7x^4y^3)^3(4x)^2 =$ _____

⑪ $(-p^2)(6pq^2) =$ _____

⑫ $(4m^3)(3m^2) =$ _____

⑬ $(2a^2bc^2)(5b^2c) =$ _____

⑭ $(-4xy)(-3x^2y^2) =$ _____

Simplify each expression.

⑮ $(c^4)^2 =$ _____

⑯ $(a^4)^3 =$ _____

⑰ $(4x^2y)^3 =$ _____

⑱ $(-3x^5)^2 =$ _____

⑲ $(-2ab^2)^6 =$ _____

⑳ $(5a^7b^6)^3 =$ _____

Test: Exponents, Adding Polynomials

Name _____

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

$$2. (3x^0y^4)(-x^2y)$$

$$3. (2x^2y)^0(3x^2y)^2$$

$$4. (-2x^4y^3)^4$$

$$5. \frac{3x^4y^2}{12x^2y}$$

$$6. \frac{-2x^4y^{-3}z}{xy^2z}$$

$$7. \frac{48x^3y}{12x^{-2}y^3z}$$

$$8. \frac{x^3z^4}{3xy^{-4}z^2}$$

$$9. \frac{(-2x^2y)^3}{(2x^4y)^2}$$

$$10. \left(\frac{-3x^4y}{2x^6y^3} \right)^{-2}$$

$$11. (-2x^4y^3)^3(4xy^3)$$

$$12. (a^2bc^3)(2a^3c^4)$$