

Warm-up:

Simplify each expression.

$$(-4x^6)(2x^8)$$

$-8x^{14}$

$$(a^5b)(127a^4b^6)$$

$127a^9b^7$

Algebra 1

Unit 4, Day 2

Multiplying Monomials

HW: Page 5 in Packet

4) $(j^2k^2)(j^3k)$ 5) $(a^2f^4)(a^2f^2)$ 6) $(cd^2)(c^2d^2)$

j^5k^3 a^4f^6 c^3d^4

7) $(2x^2)(3x^3)$ 8) $(5a^2)(4a^3)$ 9) $(4xy^3)(3x^2y^5)$

$6x^5$ $20a^5$ $12x^3y^8$

10) $(7a^2b^3)(a^2b^3)$ 11) $(-5m^3)(3m^4)$ 12) $(-3c^4d)(-4cd)$

$7a^4b^6$ $-15m^7$ $12c^5d^2$

13) $(-15xy^4)(-\frac{2}{3}m^2)$ 14) $(4g^3h)(-2g^5)$ 15) $(2ab^2c^2)(4a^2b^2c^2)$

$5x^2y^4$ $-8g^8h$ $8a^3b^4c^4$

Multiplying with Same Bases

$2^3 = 2 \cdot 2 \cdot 2$

Simplify each expression.

$(k^5)^2$
 $k^5 \cdot k^5 = k^{10}$

$(-4a^4b^6)^2$
 $(-4a^4b^6)(-4a^4b^6)$
 $16a^8b^{12}$
 $-4a^8b^{12}$
 $16a^8b^{12}$

You Try!!!

Simplify each expression.

$$(y^4)^3$$

$$y^{12}$$

$$(-3d^5e^4)^3$$

$$-27d^{15}e^{12}$$

Classwork

Complete page 4 in the packet. We will go over the answers at the end of class.

$$4) (4x^2b)^2$$

$$64x^4b^2$$

$$5) (x^2y^3)^5$$

$$x^{10}y^{15}$$

$$6) (10^3)^2$$

$$10^6 \text{ or } 1,000,000$$

$$7) (p^3)^{12}$$

$$p^{36}$$

$$8) (-6p)^2$$

$$36p^2$$

$$9) (-3y)^2$$

$$9y^2$$

$$10) (3pq^2)^2$$

$$9p^2q^4$$

$$11) (2b^3c^4)^2$$

$$4b^6c^8$$

$$12) (9pq^2)^2$$

$$81p^2q^4$$

$$13) (7b^3c^4)^3$$

$$343b^9c^{12}$$

$$14) (0.5x^2)^2$$

$$0.25x^4$$

$$15) \left(-\frac{2}{3}c\right)^3$$

$$-\frac{8}{27}c^3$$

Algebra 1

Unit 4, Day 2

Multiplying Monomials

HW: Page 5 in Packet