Homework Key

Name: _____ Date: _____ Period: 1st

Multiplying Monomials Practice

Write the equivalent of each expression.

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

a^2b^6

2. $(3a^7b^5)(-8ab^8)$

$-24a^8b^{13}$

3. $(-2ab^2)^0$

1

4. $(4a^5b)^2$

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

$16a^{10}b^2$

5. $(4x^5yz)^3$

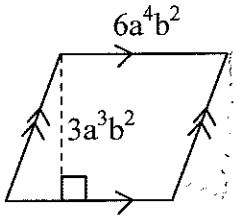
$64x^{15}y^3z^3$

6. $(x^5y^3)^4$

$x^{20}y^{12}$

Find the area.

7.

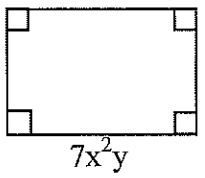


f $A = bh$

s $A = (6a^4b^2)(3a^3b^2)$

s $\boxed{A = 18a^7b^4}$

8.



f $A = lw$

s $A = (7x^2y)(3y)$

s $\boxed{A = 21x^2y^2}$

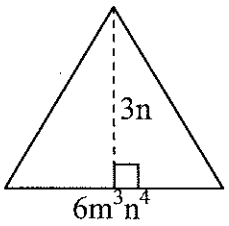
9. Find the area of a square if the length is $6a^2b^4$.

f $A = s^2$

s $A = (6a^2b^4)^2$

s $\boxed{A = 36a^4b^8}$

10.



f $A = \frac{bh}{2}$

s $A = \frac{(6m^3n^4)(3n)}{2}$

s $\boxed{A = 9m^3n^5}$

Power to a Power

- when you are taking the power of an expression (monomial) that already has a power in it

Ex: $(3a^2b)^3$

$(3a^2b)(3a^2b)(3a^2b)$

$\boxed{27a^6b^3}$

* multiplication is the shortcut of repeated addition