Algebra 1

Name _____

Assessment 14

Review

Simplify each of the following.

1. a. $x^5 \cdot x^3$

b. $p^7 \cdot q^4 \quad p^8 \cdot q^9$

2. a. $\dfrac{a^{19}}{a^{10}}$

b. $-8b^2c^4 \ ^3 \ 3b^2 \ ^2$

3. a. $5x^3y^2 \quad 2x^4y^5$

b. Simplify $5\ 7x-3\ -5\ 3x-4$

4. a. $-4n^4m^5 \ ^2$

b. Find the area and perimeter of the rectangle.

$6a^3b$ [ ]

$5a^2b^4$

5. a. $-5m^2 \quad 9m^3 \ ^3$

b. Evaluate $3+x^2-2y$ if $x=-2, y=3$

6. a. $\left(\dfrac{2}{3}x^4y\right)^3$

b. $\dfrac{x^3y^8}{x^8y^5}$

7. a. $16n^8 \cdot n^5$

b. Write the equation of the vertical line through the point (4, -2)?

8. a. $\dfrac{12a^2b^3c^4}{18a^3b^6c^2}$

b. $m^{40}m^{22}$

9. a. $3^{80} \cdot 3^{60} = ?$

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

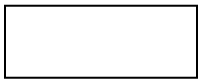
10. a. What is the slope of the line parallel to $y = \frac{2}{3}x - 4$?

b. $s^{-4} \cdot t^3 \quad s^6 \cdot t^{-7}$

11. a. $-2m^4 \quad 7m^2{}^3$

b. Write the equation of the horizontal line through the point (3, -5)?

12. a. Find the area of the rectangle.



b. $x^{50}x^{30}$