Study Guide!

Algebra 1 – Chapter 7 Test Review

Name Key Date _____ Period _____

Find each product.

1. $3e\,(2e^2 - 5e)$ Distributive Property

$6e^3 - 15e^2$

2. $(3g + 2)(3g - 2)$ Box method

$9g^2 - 4$

3. $(y - 2z)^2$ Box method

$y^2 - 4yz + 4z^2$

4. $(2a - 1)(a^2 + 3a + 5)$ Box method

$2a^3 + 5a^2 + 7a - 5$

5. $(y^2 - 5y + 3)(2y^2 + 7y - 4)$ Box method

$2y^4 - 3y^3 - 33y^2 + 41y - 12$

Find the product or quotient.

6. $(10x^3yz^2)(-2xy^5z)$ *multiply coefficients *add exponents

$-20x^4y^6z^3$

7) $(3pq^2)^2$ *distribute exponents

8. $\frac{4m^7n^2p^{-3}}{16m^3n^2p^4}$ *simplify *subtract exponents

$\frac{m^4}{4p}$

9. $\frac{x}{x^5}$

$\frac{1}{x^4}$

Simplify.

* distribute
* combine like terms

10. $6a(2a-3)-5(2a^2+9a-3)$

$2a^2-63a+15$

Find the sum or difference.

combine like terms

11. $(-3d^2-8+2d)+(4d-12+d^2)$

$-2d^2+6d-20$

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12. $(11-6q^2-q)-(q^2-5+7q)$

$-6q^2-8q+16$

Solve.

13. $w(w+7)+5w=w(w+14)+12$

$w=-6$

14. $x(x-3)+4x-3=8x+x(3+x)$

$x=-\frac{3}{10}$