Analytic Geometry

Name_____

Quiz Review

Date_____

Simplify each expression.

1) $(-3b^2 + 6b^5 - 10b^3) - (-5b^5 - b^3 - 9b^2)$

2) $(5r^5 + 6r^4 - 3r^2) + (5r^4 + 9r^5 + 6r^2)$

3) $(-2m^5 + 10m^3 + 2m) + (2 - 7m^5 + 2m^3)$

4) $(-10r^2 - 10r^4 + 4) - (7r^4 + 5r^2 + 4)$

5) $(-6a^5 + 3a^3 + a^2) + (-6a^2 - 7a^3 + 10a^5)$

6) $(x - 9x^2 + 6) - (-8 + 6x + 8x^2)$

7) $(-10x^3 + 4x^2 - x^4) + (3x^4 + 3 - 9x^2)$

8) $(-2n^2 + 4 + 5n^5) + (7n^5 - 1 + 5n)$

9) $(-4b + 2 + 7b^4) + 3(-10b^4 - 9 + 3b)$

10) $2(-8x^4 + 7x^5 + 10x^2) - (-7x^5 - 3x + 8x^4)$

Find each product.

11) $(7x-6)(x+8)$

12) $(r+2)(8r+7)$

13) $(4x+4)(7x-1)$

14) $(3b-6)(8b+8)$

15) $(4k-1)(2k^2+4k+3)$

16) $(2n-3)(2n^2-3n+3)$

17) $(2x+1)(2x^2+2x+1)$

18) $(n-5)(n^2+2n+3)$

19) $(2a^2+4a+2)(2a^2-5a-2)$

20) $(3n^2+2n+1)(5n^2+4n+5)$

21) $(p^2-3p-1)(2p^2-3p-4)$

Analytic Geometry

Name_____

Quiz Review

Solutions

Date_____

Simplify each expression.

1) $(-3b^2 + 6b^5 - 10b^3) - (-5b^5 - b^3 - 9b^2)$

$11b^5 - 9b^3 + 6b^2$

2) $(5r^5 + 6r^4 - 3r^2) + (5r^4 + 9r^5 + 6r^2)$

$14r^5 + 11r^4 + 3r^2$

3) $(-2m^5 + 10m^3 + 2m) + (2 - 7m^5 + 2m^3)$

$-9m^5 + 12m^3 + 2m + 2$

4) $(-10r^2 - 10r^4 + 4) - (7r^4 + 5r^2 + 4)$

$-17r^4 - 15r^2$

5) $(-6a^5 + 3a^3 + a^2) + (-6a^2 - 7a^3 + 10a^5)$

$4a^5 - 4a^3 - 5a^2$

6) $(x - 9x^2 + 6) - (-8 + 6x + 8x^2)$

$-17x^2 - 5x + 14$

7) $(-10x^3 + 4x^2 - x^4) + (3x^4 + 3 - 9x^2)$

$2x^4 - 10x^3 - 5x^2 + 3$

8) $(-2n^2 + 4 + 5n^5) + (7n^5 - 1 + 5n)$

$12n^5 - 2n^2 + 5n + 3$

9) $(-4b + 2 + 7b^4) + 3(-10b^4 - 9 + 3b)$

$-23b^4 + 5b - 25$

10) $2(-8x^4 + 7x^5 + 10x^2) - (-7x^5 - 3x + 8x^4)$

$21x^5 - 24x^4 + 20x^2 + 3x$

Find each product.

11) $(7x-6)(x+8)$

$7x^2+50x-48$

12) $(r+2)(8r+7)$

$8r^2+23r+14$

13) $(4x+4)(7x-1)$

$28x^2+24x-4$

14) $(3b-6)(8b+8)$

$24b^2-24b-48$

15) $(4k-1)(2k^2+4k+3)$

$8k^3+14k^2+8k-3$

16) $(2n-3)(2n^2-3n+3)$

$4n^3-12n^2+15n-9$

17) $(2x+1)(2x^2+2x+1)$

$4x^3+6x^2+4x+1$

18) $(n-5)(n^2+2n+3)$

$n^3-3n^2-7n-15$

19) $(2a^2+4a+2)(2a^2-5a-2)$

$4a^4-2a^3-20a^2-18a-4$

20) $(3n^2+2n+1)(5n^2+4n+5)$

$15n^4+22n^3+28n^2+14n+5$

21) $(p^2-3p-1)(2p^2-3p-4)$

$2p^4-9p^3+3p^2+15p+4$