Remediation operations on Polynomials

Date_____ Period____

Simplify each expression.

1) $(7p - 5p^4 - 7) + (-5p - 8 + 5p^3)$

2) $(n^3 + 5n^4 - 7) - (4n^3 + 4 - n^4)$

3) $(-4k^4 + 2k^2 + 1) - (-6 - 4k^2 - k^4)$

4) $(p^3 - p^4 + 4) + (-3 - p^3 + p^4)$

5) $(-4x - 8x^4 + 3) - (3x^4 + 8 - 4x)$

6) $(-a^2 - a^4 - 8a^3) - (-5a^3 + 5a^2 + 3a^4)$

7) $(-7k^3 + 2 + 4k^2) + (8k^2 - 7k^3 - 7k)$

8) $(8x^2 + 4x^4 + 2) + (8x^2 + 7x^4 - 4)$

Find each product.

9) $(7b + 6)(7b - 4)$

10) $(5b - 2)(7b - 3)$

11) $(3k - 1)(6k + 1)$

12) $(v + 8)(3v + 7)$

13) $(n-4)(7n^2+5n+7)$

14) $(5n-1)(8n^2+6n-8)$

15) $(4a+4)(4a^2-7a-4)$

16) $(8x-5)(7x^2+3x+5)$

Name each polynomial by degree and number of terms. Identify the leading coeffiecient

17) $9a^3-4a$

18) $x^5+10x^4-5x^3-9x^2$

19) $-8m^3-7m^2+6m+8$

20) $-4r^2-10r+6$

21) $7n^5-2n^3+2n^2$

22) $4x^3$

23) $10n^5$

24) $2m^6$

25) 4

26) $3v^4+4v^3$

Geometry Name_____ ID: 1

Remediation operations on Polynomials

Date_____ Period____

Simplify each expression.

1) $(7p - 5p^4 - 7) + (-5p - 8 + 5p^3)$

$-5p^4 + 5p^3 + 2p - 15$

2) $(n^3 + 5n^4 - 7) - (4n^3 + 4 - n^4)$

$6n^4 - 3n^3 - 11$

3) $(-4k^4 + 2k^2 + 1) - (-6 - 4k^2 - k^4)$

$-3k^4 + 6k^2 + 7$

4) $(p^3 - p^4 + 4) + (-3 - p^3 + p^4)$

1

5) $(-4x - 8x^4 + 3) - (3x^4 + 8 - 4x)$

$-11x^4 - 5$

6) $(-a^2 - a^4 - 8a^3) - (-5a^3 + 5a^2 + 3a^4)$

$-4a^4 - 3a^3 - 6a^2$

7) $(-7k^3 + 2 + 4k^2) + (8k^2 - 7k^3 - 7k)$

$-14k^3 + 12k^2 - 7k + 2$

8) $(8x^2 + 4x^4 + 2) + (8x^2 + 7x^4 - 4)$

$11x^4 + 16x^2 - 2$

Find each product.

9) $(7b + 6)(7b - 4)$

$49b^2 + 14b - 24$

10) $(5b - 2)(7b - 3)$

$35b^2 - 29b + 6$

11) $(3k - 1)(6k + 1)$

$18k^2 - 3k - 1$

12) $(v + 8)(3v + 7)$

$3v^2 + 31v + 56$

13) $(n-4)(7n^2+5n+7)$

$7n^3-23n^2-13n-28$

14) $(5n-1)(8n^2+6n-8)$

$40n^3+22n^2-46n+8$

15) $(4a+4)(4a^2-7a-4)$

$16a^3-12a^2-44a-16$

16) $(8x-5)(7x^2+3x+5)$

$56x^3-11x^2+25x-25$

Name each polynomial by degree and number of terms. Identify the leading coeffiecient

17) $9a^3-4a$

cubic binomial

18) $x^5+10x^4-5x^3-9x^2$

quintic polynomial with four terms

19) $-8m^3-7m^2+6m+8$

cubic polynomial with four terms

20) $-4r^2-10r+6$

quadratic trinomial

21) $7n^5-2n^3+2n^2$

quintic trinomial

22) $4x^3$

cubic monomial

23) $10n^5$

quintic monomial

24) $2m^6$

sixth degree monomial

25) 4

constant monomial

26) $3v^4+4v^3$

quartic binomial