Secondary Math 2 Name_____

1.2 Distributive Property & Add, Subtract, and Multiply Polynomials Classwork

Simplify each expression.

1) $9(-2-10x)$

$-18-90x$

2) $5(-5-10k)$

$-25-50k$

3) $-8(x-10)+2$

$-8x+82$

4) $6(-7-6p)+6(-4p+10)$

$18-60p$

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

$-7r^4-r^2$

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

$-7n^3$

7) $(2a^4-5a^3+2a^2)+(5a^3+6a^2)$

$2a^4+8a^2$

8) $(6k^4-3k^3+1)-(5k^4+3)$

k^4-3k^3-2

9) $(x^2-2x^4)-(7x^2-7x-6x^4)$

$4x^4-6x^2+7x$

10) $(4v^4-7v)-(8+5v+5v^4)$

$-v^4-12v-8$

Find each product.

11) $(6b - 5)(3b + 1)$

$18b^2 - 9b - 5$

12) $(3n - 2)(5n - 3)$

$15n^2 - 19n + 6$

13) $(5n + 3)(6n^2 - 4n + 7)$

$30n^3 - 2n^2 + 23n + 21$

14) $(8a + 4)(a^2 + 7a - 8)$

$8a^3 + 60a^2 - 36a - 32$

15) $(x + 3)^2$

16) $(5k - 2)^2$

17) Explain what it means to combine "like terms". Why can you do this?

18) Why does the "Foil" method not work when multiplying a binomial and a trinomial?