

Warm-up: Simplify each expression.

1) $(6k - 7k^2) + (4k^2 + 6)$

2) $(8 - 5k^2) - (7k^2 + 5)$

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

4) $(5p^2 - 8) - (3p + 4 - 5p^2)$

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

6) $(6x^4 - x^3 + 5) - (2x^4 + 3x^3 - 1)$

Multiplying Polynomials: Find each product.

7) $(5p + 3)(8p + 7)$

8) $(3a + 3)(3a - 2)$

9) $(3x + 5)(7x - 4)$

10) $(4x + 5)(4x + 6)$

11) $(k - 2)(6k + 1)$

12) $(4m + 2)(4m + 5)$

Work *all* the problems before
checking the answers!

Warm-up: Simplify each expression.

1) $(6k - 7k^2) + (4k^2 + 6)$
 $-3k^2 + 6k + 6$

2) $(8 - 5k^2) - (7k^2 + 5)$
 $-12k^2 + 3$

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

4) $(5p^2 - 8) - (3p + 4 - 5p^2)$
 $10p^2 - 3p - 12$

5) $(6n - 4n^4 + 5n^3) + (n^3 - 6n^4 + 7n)$
 $-10n^4 + 6n^3 + 13n$

6) $(6x^4 - x^3 + 5) - (2x^4 + 3x^3 - 1)$
 $4x^4 - 4x^3 + 6$

Multiplying Polynomials: Find each product.

7) $(5p + 3)(8p + 7)$
 $40p^2 + 59p + 21$

8) $(3a + 3)(3a - 2)$
 $9a^2 + 3a - 6$

9) $(3x + 5)(7x - 4)$
 $21x^2 + 23x - 20$

10) $(4x + 5)(4x + 6)$
 $16x^2 + 44x + 30$

11) $(k - 2)(6k + 1)$
 $6k^2 - 11k - 2$

12) $(4m + 2)(4m + 5)$
 $16m^2 + 28m + 10$