EXTRA PRACTICE 19
Addition and Subtraction of Polynomials
Use after Section 4.1 **Name_____**

Examples:

Add. $(2x^2 - 3x + 4) + (8x^2 - 7x - 6)$ $= 2x^2 - 3x + 4 + 8x^2 - 7x - 6$

$= (2 + 8)x^2 + (-3 - 7)x + (4 - 6)$

$= 10x^2 - 10x - 2$

Add. $3x^2 + 3x - 7$

$4x^2 - 2x + 8$

$7x^2 + x + 1$

Add.

1. $(2x - 3) + (4x - 2) =$ _____

2. $(3x + 7) + (5x - 4) =$ _____

3. $(6x^2 + 2) + (3x^2 - 4x + 5) =$ _____

4. $(2x - 3) + (5x^2 - 4x + 2) =$ _____

5. $(4x^2 + 2x) + (5x^2 - 3x) =$ _____

6. $(7x^2 - 3x + 2) + (3x - 2x^2 + 8) =$ _____

7. $(4x^5 - 3x^3 + 2x^2 - 1) + (5x^4 - 7x^3 + 3x + 1) =$ _____

8. $(1 + 2x^2 - 3x^3 + 5x^4) + (3x^2 - 3x^3 + 7x^4 - 2x) =$ _____

9. $4x^2 + 7x - 8$
   $3x^2 + 2x + 3$
   $x^2 + 5$

10. $7x^2 - 8x + 7$
    $7x + 5$
    $-2x^2 + 3x$

EXTRA PRACTICE 19 (continued)
Addition and Subtraction of Polynomials
Use after Section 4.1

Examples:

Subtract. $(5x^2 - 7x + 2) - (3x^2 - 2x + 3) = 5x^2 - 7x + 2 - 3x^2 + 2x - 3$

$= 2x^2 - 5x - 1$

Subtract. $4x^4 - 3x^2 + 5x - 1$

$2x^4 \quad + 4x - 8$

$2x^4 - 3x^2 + x + 7$

Subtract.

11. $(4x + 3) - (7x - 5) =$ _____

12. $(-3x - 5) - (-7x - 4) =$ _____

13. $(5x^2 - 3x + 2) - (2x^2 + 7x + 5) =$ _____

14. $(5x^3 - 3x + 1) - (-2x^3 + x^2 - 4) =$ _____

15. $(1 - 2x + 5x^2) - (2 - 6x + 2x^2) =$ _____

16. $(5 - 3x^2) - (4x^2 - 2x + 7) =$ _____

17. $(4x^3 - 7x^2 + 2x - 1) - (8x^3 - 3x^2 + 5x - 2) =$ _____

18. $(8x^5 - 4x + 5) - (3x^4 + 2x - 7) =$ _____

19. $5x^2 - 3x + 2$

$4x^2 + 7x - 5$

20. $8x^3 \quad + 2x - 3$

$4x^3 - 2x^2 \quad + 8$