15.10.15

Algebra

Distributive Property *Section 6.5* Pg. 313-315	Expanding and Simplifying **Classwork**: p. 314-15: 2, 5, 8, 11, 21, 23, 25, 27, 29, 32, 33, 36, 37, 40, 41, 44, 53, 56, 61 **Homework**: p. 314-5: 3, 4, 10, 12, 17, 19, 20, 21, 22, 24, 26, 28, 30, 34, 35, 38, 39, 43, 44, 55, 57, 58, 59, 62

Given 3 numbers a, b, c then the statement

$a(b+c)$ has the "feature" that "ax" distributes through the bracket : $a \times b + a \times c$

Expand.

1. $5(x+1)$

$= 5x + 5$

2. $3(x-2)$

$= 3x - 6$

5. $7(x-1) = 7x - 7$

6. $5(x+3)$

7. $2(n+6) = 2n + 12$

8. $4(m-5)$

11. $10(d+2)$

$= 10d + 20$

Expand.

23. $-3(x+2) = -3x-6$

25. $-2(5y-2) = -10y+4$

27. $-5(2x-1) = -10x+5$

29. $-4(x+5) = -4x-20$

32. $-0.2(3x-5) = -0.6x+1$

33. $-2(3x-2y) = -6x+4y$

36. $-(2x+y) = -2x-y$

37. $-5(-x+y) = +5x-5y$

40. $-4(2m-n) = -8m+4n$

41. $-4(2x+3y+z) = -8x-12y-4z$

44. $-1(2c-3d+5) = -2c+3d-5$

Expand and simplify.

52. $3(x^2+4x-3)+2(x^2+5)$

53. $2(3x^2+7x-3)+4(x-3)$

$= 6x^2+14x-6+4x-12$

$= 6x^2+18x-18$

56. $-(2a+3)+3(a-1)-4(a-2)$

$= -2a-3+3a-3-4a+8$

$= -3a+2$

61. $4(x^2+2x-3)-2(x^2+4y-1)$

$= 4x^2+8x-12-2x^2-8y+2$

$= 2x^2+8x-8y-10$