Expand and simplify each of the following in your notebook using a method of your choice.

2. $7x(x+y)$
4. 10 <i>y</i> (6 <i>xy</i> – 14)
6. $-6x(8-6x^3)$
8. $(x-6)(x+9)$
10. $(x-5)(x+5)$
12. $(x + y)(z + y)$
14. $(x^2 + 1)(x + 9)$

Name _____ Period _____ Date _____

Expand and simplify each of the following in your notebook using a method of your choice.

1. 5(x+2)**2.** 7x(x + y)3. $5x(6x^2 + 10)$ **4.** 10y(6xy - 14)5. $-2x^2(-2+6xy)$ 6. $-6x(8-6x^3)$ 8. (x-6)(x+9)7. (x+2)(x+5)9. (x+3)(x+3)10. (x-5)(x+5)**12.** (x + y)(z + y)**11.** (x + 5)(y + 10)14. $(x^2 + 1)(x + 9)$ **13.** (100 + x)(x - 100)

15.
$$(x - 5)(2x + 13)$$

17. $(11s + r)(-7r + s)$
19. $(3x + 10)(2x - 5)$
21. $(x + 2)(x^2 + 5x + 6)$
23. $(x + 3)(x^2 + 7x + 11)$
25. $(2x + 1)(x^2 - 6x + 2)$
27. $(3x + 5)(5x^2 + 4x + 11)$
29. $(x^2 - 2x + 1)(x^2 + 5x + 6)$

16.
$$(3m + 6)(4m + 11)$$

18. $(6 - x)(x + 100)$
20. $(-y + 2)(-x - 3)$
22. $(y + 3)(y^2 - 6y + 1)$
24. $(y + 5)(y^2 - 7y - 10)$
26. $(3y + 3)(4y^2 + 5y + 20)$
28. $(2y + 7)(8y^2 - 6y + 1)$
30. $(x^2 - 6x + 2)(x^2 + 3x + 2)$

15.
$$(x-5)(2x+13)$$
16.17. $(11s+r)(-7r+s)$ **18.19.** $(3x+10)(2x-5)$ **20.21.** $(x+2)(x^2+5x+6)$ **22.23.** $(x+3)(x^2+7x+11)$ **24.25.** $(2x+1)(x^2-6x+2)$ **26.27.** $(3x+5)(5x^2+4x+11)$ **28.29.** $(x^2-2x+1)(x^2+5x+6)$ **30.**

16.
$$(3m + 6)(4m + 11)$$

18. $(6 - x)(x + 100)$
20. $(-y + 2)(-x - 3)$
22. $(y + 3)(y^2 - 6y + 1)$
24. $(y + 5)(y^2 - 7y - 10)$
26. $(3y + 3)(4y^2 + 5y + 20)$
28. $(2y + 7)(8y^2 - 6y + 1)$
30. $(x^2 - 6x + 2)(x^2 + 3x + 2)$