MULTIPLYING AND FACTORING POLYNOMIALS **NAME**_____

Find the product of the two binomials

1. $(x + 5)(x + 4) =$ _____
2. $(x - 7)(x - 4) =$ _____
3. $(x - 4)(x + 6) =$ _____
4. $(x + 9)(x - 8) =$ _____
5. $(x - 12)(x + 2) =$ _____
7. $(x - 5)(x + 2) =$ _____
8. $(x-3)^2 =$ _____
9. $(x+14)^2 =$ _____
10. $(3x+20)^2 =$ _____
11. $(2x-15)^2 =$ _____
12. $(x - 15)(x +15) =$ _____
13. $(x + 8)(x - 8) =$ _____
14. $(x - 7)(x + 7) =$ _____

Factor each polynomial into ( )( ) – Reverse distributing

15. $x^2+5x+6 =$ _____
16. $x^2+12x+35 =$ _____
17. $x^2-8x+15 =$ _____
18. $x^2+13x+42 =$ _____
19. $x^2-16x+55 =$ _____
20. $x^2+5x-24 =$ _____
21. $x^2-7x-30 =$ _____
22. $\boldsymbol{x}^4-9\boldsymbol{x}^2+20 =$ _____
23. $x^2-22x+105 =$ _____
24. $x^2+12x+36 =$ _____
25. $x^2-24x+144 =$ _____
26. $x^2+16x-36 =$ _____
27. $x^2-6x-16 =$ _____