

Name : _____ Date: _____ Period: _____

Multiplying Polynomials

Multiply the following using distribution:

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

2. $(2x + 1)(x^2 + 2x + 5)$

3. $(x - 4)(x^2 - 4x - 3)$

4. $(7x + 2)(x + 1)$

5. $(x - 1)(x^2 + x + 1)$

6. $(4x - 3)(2x - 5)$

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

8. $(x + 2)(x^2 - 2x + 4)$

Multiply the following mentally:

9. $(x + 2)(x + 6)$

10. $(x - 9)(x + 5)$

11. $(x + 7)^2$

12. $(x + 4)(x - 10)$

13. $(x + 8)(x - 7)$

14. $(2x - 5)^2$

15. $(x - 8)^2$

16. $(x - 7)(x + 7)$

17. $(3x + 4)^2$

18. $(x - 3)(x - 11)$

19. $(x - 6)(x - 1)$

20. $(x + 10)(x - 10)$

21. Write the equation of the line in that has a slope of $\frac{-2}{3}$ and goes through the point $(-2, 6)$.