

Name _____

Multiplying Special Case Polynomials

Find each product.

1) $(x + 5)(x - 5)$

2) $(n - 1)(n + 1)$

3) $(p - 1)^2$

4) $(x - 3)(x + 3)$

5) $(x - 4)^2$

6) $(n + 3)^2$

7) $(x - 5)(x + 5)$

8) $(n - 5)^2$

9) $(2k^2 + 1)^2$

10) $(8a^2 + 4)(8a^2 - 4)$

11) $(2 + 5n^2)^2$

12) $(3x - 7)(3x + 7)$

$$13) (3 + 7v^2)(3 - 7v^2)$$

$$14) (7v^2 - 6)(7v^2 + 6)$$

$$15) (2 + v)^2$$

$$16) (6v + 3)(6v - 3)$$

$$17) (8a^2 - 2)(8a^2 + 2)$$

$$18) (4a + 7)^2$$

$$19) (2n - 7)^2$$

$$20) (-m + 5n)(-m - 5n)$$

$$21) (7u + 4v)(7u - 4v)$$

$$22) (-y - 3x)(-y + 3x)$$

$$23) (-9x^2 - 10y)^2$$

$$24) (4u + 9v)^2$$

$$25) (7u + 6v)(7u - 6v)$$

$$26) (-6x - 7y^2)^2$$

Review. Solve the equation by factoring.

27. $x^2 + 7x + 15 = 5$

28. $3x^2 - 16x - 7 = 5$

29. $12xy - 28x - 15y + 35 = 0$

30. $x^2 - 11x + 19 = -5$

31. $6x^2 - 13x + 3 = -3$

32. $35x^2 - 22x + 7 = 4$

33. $35xy - 5x - 56y + 8 = 0$

34. $5x^2 + 16x + 16 = 4x^2 + 26x - 8$

35. $15x^2 - 3x = 3 - 7x$

36. $12x^2 - 7x + 10 = 11x^2 - 6x + 100$

37. $-9x^2 + 11x - 16 = -13x^2 + 26x + 9$

38. $6x^2 + 5x - 6 = 5x^2 + 5x + 19$