9.7: Factor Special Products

Goals: *Factor difference of two squares

RECALL

$(a + b)(a - b) =$

Factor:

Ex: $y^2 - 16$

Ex: $x^2 - 9$

Ex: $25m^2 - 16$

Ex: $x^2 - 49y^2$

Ex: $8 - 18n^2$

Ex: $4y^2 - 64$

Ex: $64c^2 - 16$

Ex: $x^2 - 81y^2$

Ex: $12 - 48m^2$

Solve:

Ex: $w^2 - 16 = 0$

Ex: $n^2 - 81 = 0$

Ex: $x^2 = 49$

9.7 Warm Up

Fast Foiling

Recall

$(a + b)(a - b) =$

Simplify each problem using the special products formulas above.

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

2. $(3n - 4)(3n + 4)$

3. $(8m - 2)(8m + 2)$

4. $(k + 4)(k - 4)$

5. $(3x + 1)(3x - 1)$

6. $(x - 8)(x + 8)$

7. $(2t - 6)(2t + 6)$

8. $(5m - 3)(5m + 3)$

9. $(2a - 5)(2a + 5)$

10. $(8x - 5)(8x + 5)$

11. $(2n - 5)(2n + 5)$

12. $(4m - 3)(4m + 3)$

13. $(7g - 4)(7g + 4)$

14. $(3c + 1)(3c - 1)$

15. $(2x - 6)(2x + 6)$