

Name

Class

No.

Expansion of Perfect Squares

Formulas: $(x + a)^2 = (x + a)(x + a) = x^2 + 2ax + a^2$
 $(x - a)^2 = (x - a)(x - a) = x^2 - 2ax + a^2$

Expand the following binomials.

Example:

Expand $(x + 5)(x + 5) = (x)(x) + (x)(5) + (5)(x) + (5)(5)$
 $= x^2 + 5x + 5x + 25$
 $= x^2 + 10x + 25$

Important: When you write exponent use ^.

For example: $x^2 = x^2$

1. $(x + 3)(x + 3) =$

2. $(8 + y)(8 + y) =$

3. $(x + y)(x + y) =$

Example:

Expand $(x - 5)(x - 5) = (x)(x) + x(-5) + (-5)(x) + (-5)(-5)$
 $= x^2 - 5x - 5x + 25$
 $= x^2 - 10x + 25$

4. $(x - 2y)(x - 2y) =$

5. $(4x - y)(4x - y) =$

6. $(2x - 3a)(2x - 3a) =$