

## Factoring Perfect Square Trinomials

Date \_\_\_\_\_ Period \_\_\_\_\_

**Factor each completely.**

1)  $x^2 + 8x + 16$

2)  $25v^2 - 20v + 4$

Remember: When the quadratic factors into the same two factors, you must rewrite it as that factor squared.

3)  $k^2 + 4k + 4$

4)  $b^2 - 10b + 25$

$$(A + B)(A + B) \longrightarrow (A + B)^2$$
$$(A - B)(A - B) \longrightarrow (A - B)^2$$

5)  $4n^2 - 4n + 1$

6)  $4m^2 + 12m + 9$

7)  $25x^2 - 10x + 1$

8)  $25m^2 - 30m + 9$

9)  $x^2 - 8x + 16$

10)  $x^2 + 2x + 1$

11)  $75n^2 + 60n + 12$

12)  $8x^2 + 40x + 50$

13)  $27k^2 - 72k + 48$

14)  $50r^2 + 20r + 2$

15)  $12x^2 - 36x + 27$

16)  $45v^2 - 30v + 5$

17)  $18b^2 + 24b + 8$

18)  $36k^2 - 96k + 64$

19)  $36n^2 + 48n + 16$

20)  $45n^2 + 30n + 5$