Name _____ Class _____ Date _____

7-7 Practice

Form G

Factoring Perfect Squares

Factor each expression.

1. $h^2 + 10h + 25$

2. $v^2 - 14v + 49$

3. $d^2 - 22d + 121$

4. $m^2 + 4m + 4$

5. $q^2 + 6q + 9$

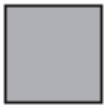
6. $p^2 - 24p + 144$

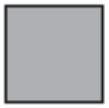
7. $36x^2 + 60x + 25$

8. $64x^2 + 48x + 9$

9. $49n^2 + 14n + 1$

The given expression represents the area. Find the side length of the square.

10. 
$64x^2 + 80x + 25$

11. 
$9y^2 - 24y + 16$

12. 
$4t^2 + 36t + 81$

13. The area of a square parking lot is $49p^4 - 84p^2 + 36$. Find the length of the parking lot.

14. A fabric designer is making a checked pattern. Each square in the pattern has an area of $x^2 - 16x + 64$. What is the length of one side of a check?

15. A mosaic is made of small square tiles called tesserae. Suppose the area of one tesserae is $9x^2 + 12x + 4$. What is the length of one side of a tesserae?