

LESSON
9.7**Practice A**

For use with pages 600–605

Match the trinomial with its correct factorization.

1. $x^2 - 25$

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

3. $x^2 - 10x + 25$

A. $(x + 5)^2$

B. $(x - 5)(x + 5)$

C. $(x - 5)^2$

Factor the difference of two squares.

4. $x^2 - 1$

5. $b^2 - 81$

6. $m^2 - 100$

7. $p^2 - 225$

8. $4y^2 - 1$

9. $16n^2 - 25$

10. $9w^2 - 100$

11. $64z^2 - 36$

12. $49d^2 - 25$

13. $4r^2 - 121$

14. $9s^2 - 144$

15. $c^2 - 625$

Factor the perfect square trinomial.

16. $x^2 + 6x + 9$

17. $b^2 + 10b + 25$

18. $w^2 - 12w + 36$

19. $m^2 - 8m + 16$

20. $r^2 - 20r + 100$

21. $z^2 + 16z + 64$

22. $s^2 + 22s + 121$

23. $x^2 - 16x + 64$

24. $4c^2 + 4c + 1$

25. $16d^2 + 8d + 1$

26. $9y^2 - 6y + 1$

27. $9p^2 - 12p + 4$

Solve the equation.

28. $x^2 - 9 = 0$

29. $p^2 + 14p + 49 = 0$

30. $d^2 - 10d + 25 = 0$

31. $25m^2 - 1 = 0$

32. $r^2 - 2r + 1 = 0$

33. $n^2 + 20n + 100 = 0$

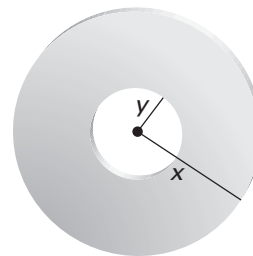
34. $4y^2 - 9 = 0$

35. $36x^2 - 64 = 0$

36. $w^2 + 4w + 4 = 0$

37. Washers Washers are available in many different sizes.

- Write and factor an expression for the area of one side of the washer. Leave your answer in terms of π .
- Find the area of one side of the washer when $x = 8$ centimeters and $y = 3$ centimeters.

**38. Cherry Tree** A cherry falls from a tree branch that is 9 feet above the ground.

- How far above the ground is the cherry after 0.2 second?
- After how many seconds does the cherry reach the ground?

39. Wind Chime A wind chime falls from a roof that is 10 feet above the ground.

- How far above the ground is the wind chime after 0.5 second?
- After how many seconds does the wind chime reach the ground?