

Name: _____ Date: _____ Per: _____

Factor Trinomials in the Form $x^2 + bx + c$

9.5 Practice 2

Factor each trinomial.

1. $a^2 + 10a + 24$

2. $h^2 + 12h + 27$

3. $x^2 + 14x + 33$

4. $g^2 - 2g - 63$

5. $w^2 + w - 56$

6. $y^2 + 4y - 60$

7. $b^2 + 4b - 32$

8. $n^2 - 3n - 28$

9. $c^2 + 4c - 45$

10. $z^2 - 11z + 30$

11. $d^2 - 16d + 63$

12. $x^2 - 11x + 24$

13. $q^2 - q - 56$

14. $x^2 - 6x - 55$

15. $32 + 18r + r^2$

16. $48 - 16g + g^2$

17. $j^2 - 9jk - 10k^2$

18. $m^2 - mv - 56v^2$

Solve each equation.

19. $x^2 + 17x + 42 = 0$

20. $p^2 + 5p - 84 = 0$

21. $k^2 + 3k - 54 = 0$

22. $b^2 - 12b - 64 = 0$

23. $n^2 + 4n = 32$

24. $h^2 - 17h = -60$

25. $c^2 - 26c = 56$

26. $z^2 - 14z = 72$

27. $y^2 - 84 = 5y$

28. $80 + a^2 = 18a$

29. $u^2 = 16u + 36$

30. $17s + s^2 = -52$

31. Find all values of k so that the trinomial $x^2 + kx - 35$ can be factored using integers.

CONSTRUCTION For numbers 32 and 33, use the following information.

A construction company is planning to pour concrete for a driveway. The length of the drive is 16 feet longer than its width w .

32. Write a polynomial expression to represent the area of the driveway.

33. Find the dimensions of the driveway if it has an area of 260 square feet.

Gardening: For questions 34 and 35 use the information below.

34. A garden is divided in two sections of equal area. One section has tulips and the other has lilies. Write a polynomial to represent the situation.

35. Solve the polynomial to find the length and width of each section.

