

Factoring; Combined

Determine the factoring method to be used by determining the number of terms and the coefficients.

Be sure to use the Distributive Property First. Then try the label as the Difference of 2 Squares, Addition Method ($a = 1$) or the ac Method ($a \neq 1$)

Factor each expression.

$$1. \ x^2 + 8x + 16$$

$$2. \ n^2 + 10n + 25$$

$$3. \ y^2 - 4y + 49$$

$$4. \ w^2 - 16w + 64$$

$$5. \ y^2 + 12y + 36$$

$$6. \ u^2 + 18u + 81$$

$$7. \ 4a^2 + 4a + 1$$

$$8. \ 9y^2 + 6y + 1$$

$$9. \ 4a^2 - 12a + 9$$

$$10. \ 9w^2 + 24w + 16$$

$$11. \ 5x^2 - 20$$

$$12. \ x^2 - 9x + 14$$

$$13. \ x^2 + 12x + 32$$

$$14. \ n^2 - 10n + 9$$

$$15. \ m^8 - 1$$

Factoring; Combined

$$16. \ x^2 - 9x + 20$$

$$17. \ x^2 - 10x + 24$$

$$18. \ x^2 - 5x + 6$$

$$19. \ 4a^2b - 12b$$

$$20. \ n^2 - 10n + 21$$

$$21. \ x^2 + 3x - 4$$