

Factoring Special Products

1. Factor the difference of two squares completely:

$$x^2 - 49$$

2. Factor the difference of two squares completely:

$$9y^2 - 16$$

3. Factor the difference of two squares completely:

$$48x^2 - 3y^2$$

4. Factor the difference of two squares completely:

$$x^{10} - y^8$$

5. Factor the difference of two squares completely:

$$32x^2z - 2y^2z$$

6. Factor the difference of two squares completely:

$$9 - (2x - y)^2$$

7. Factor the difference of two squares completely:

$$x^4 - 16$$

8. Factor the sum or difference of two cubes completely:

$$x^3 + 27$$

9. Factor the sum or difference of two cubes completely:

$$m^6 - 8n^3$$

10. Factor the sum or difference of two cubes completely:

$$81x^3 + 24y^3$$