

Factorization

- Factorize the following expressions.
 - $3a + 6b + 12c$
 - $-4x^2 - 6y - 20y^2$
 - $-27 - 15t - 18t^2$
- Factorize the following expressions.
 - $abc - 2c + ab - 2$
 - $x^2 + y - xy - x$
- Factorize the following expressions.
 - $ab + 1 + a + b$
 - $mn + 1 - m - n$
- Factorize the following expressions.
 - $2ab - bc + cd - 2ad$
 - $3mn - 2m + 4 - 6n$
- Factorize the following polynomials.
 - $16m^2n - 4m^3$
 - $3a(b - 2c) - 2(b - 2c)$
 - $12x^2y^2 + 4xy^3 - 6x^2y$
- Factorize the following expressions.
 - $4b^2 - 49$
 - $m^2 - 9n^2$
 - $64r^2 - 25s^2$
- Factorize the following polynomials.
 - $a^2 - 12a + 36$
 - $81 + 18b + b^2$
 - $c^2 - 22c + 121$

8. Factorize the following polynomials.

(a) $3t^2 - 30t + 75$

(b) $96 + 48y + 6y^2$

(c) $16y^2 - 36x^2$

9. Factorize the following expressions.

(a) $25m^2 - 36n^2 - 5m - 6n$

(b) $81x^4 - 256$

10. Factorize the following expressions.

(a) $x^2 - y^2 + y + x$

(b) $9m^2 - 9 + 24mn + 16n^2$

11. Factorize the following expressions.

(a) $6(x - y)^2 + 3(x - y)(k + 2)$

(b) $(2a + c)(a - b) + (b - a)(c - 2a)$

(c) $am - bm - an + bn + a - b$

(d) $(5x - 2)(y - 3k) - (2 - 5x)(3y - k)$