

次の式を因数分解しよう！

$$(1) x^3 + 14x^2 + 59x + 70$$

$$(2) x^3 + 15x^2 + 71x + 105$$

$$(3) x^3 + 2x^2 - 19x - 20$$

$$(4) x^3 + 2x^2 - 71x - 72$$

$$(5) x^3 + 15x^2 + 38x - 144$$

$$(6) x^3 + 14x^2 + 21x - 216$$

$$(7) x^3 - 4x^2 - 20x + 48$$

$$(8) x^3 - 5x^2 - 18x + 72$$

$$(9) x^3 - 8x^2 + 19x - 12$$

$$(10) x^3 - 14x^2 + 55x - 42$$

【解答】

(1) $(x + 2)(x + 5)(x + 7)$

(2) $(x + 3)(x + 5)(x + 7)$

(3) $(x + 1)(x - 4)(x + 5)$

(4) $(x + 1)(x - 8)(x + 9)$

(5) $(x - 2)(x + 8)(x + 9)$

(6) $(x - 3)(x + 8)(x + 9)$

(7) $(x - 2)(x + 4)(x - 6)$

(8) $(x - 3)(x + 4)(x - 6)$

(9) $(x - 1)(x - 3)(x - 4)$

(10) $(x - 1)(x - 6)(x - 7)$