

次の式を因数分解しよう！

$$(1) x^3 + 14x^2 + 53x + 40$$

$$(2) x^3 - 4x^2 - 29x - 24$$

$$(3) x^3 - 49x - 120$$

$$(4) x^3 + 4x^2 - 59x - 126$$

$$(5) x^3 + 5x^2 - 2x - 24$$

$$(6) x^3 - 11x^2 + 23x + 35$$

$$(7) x^3 - 4x^2 - 25x + 28$$

$$(8) x^3 + 6x^2 - 25x + 18$$

$$(9) x^3 - 37x + 84$$

$$(10) x^3 - 16x^2 + 73x - 90$$

【解答】

(1) $(x + 1)(x + 5)(x + 8)$

(2) $(x + 1)(x + 3)(x - 8)$

(3) $(x + 3)(x + 5)(x - 8)$

(4) $(x + 2)(x - 7)(x + 9)$

(5) $(x - 2)(x + 3)(x + 4)$

(6) $(x + 1)(x - 5)(x - 7)$

(7) $(x - 1)(x + 4)(x - 7)$

(8) $(x - 1)(x - 2)(x + 9)$

(59) $(x - 3)(x - 4)(x + 7)$

(60) $(x - 2)(x - 5)(x - 9)$