式の展開 3項・工夫（20問）　版C

なまえ：＿＿＿＿＿＿＿＿＿＿＿＿　　日づけ：＿＿＿＿＿＿

(1) $(x^2 + x - 4)(x^2 - x - 4) =$

(2) $(x + y + 5)(x + y - 7) =$

(3) $(x + 3y - 2)^2 =$

(4) $(x + y + 5)(x + y - 4) =$

(5) $(x + 2)(x - 2)(x^2 + 4) =$

(6) $(x + 3y - 5)^2 =$

(7) $(x + 1)(x + 2)(x + 3) =$

(8) $(x + y + 3)(x + y + 6) =$

(9) $(x - 3y + 2)^2 =$

(10) $(x + 2y - 4)^2 =$

(11) $(x + 2)(x - 3)(x - 5) =$

(12) $(x + y - 2)(x + y + 4) =$

(13) $(x + 2)(x - 3)(x + 4) =$

(14) $(x + 1)(x - 4)(x - 5) =$

(15) $(x^2 + 4x + 3)(x^2 - 4x + 3) =$

(16) $(x + y + 4)(x + y + 3) =$

(17) $(x + 1)(x - 1)(x^2 + 1) =$

(18) $(x + 2y - 1)^2 =$

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

(20) $(x + 3)(x - 3)(x^2 + 9) =$

式の展開 3項・工夫（20問）　版Cの答え

※ 置き換えの問題は、x + y を1つの文字と見て展開したかを見てください。

(1) $(x^2 + x - 4)(x^2 - x - 4)$
$= x^4 - 9x^2 + 16$

(2) $(x + y + 5)(x + y - 7)$
$= x^2 + 2xy + y^2 - 2x - 2y - 35$

(3) $(x + 3y - 2)^2$
$= x^2 + 6xy + 9y^2 - 4x - 12y + 4$

(4) $(x + y + 5)(x + y - 4)$
$= x^2 + 2xy + y^2 + x + y - 20$

(5) $(x + 2)(x - 2)(x^2 + 4)$
$= x^4 - 16$

(6) $(x + 3y - 5)^2$
$= x^2 + 6xy + 9y^2 - 10x - 30y + 25$

(7) $(x + 1)(x + 2)(x + 3)$
$= x^3 + 6x^2 + 11x + 6$

(8) $(x + y + 3)(x + y + 6)$
$= x^2 + 2xy + y^2 + 9x + 9y + 18$

(9) $(x - 3y + 2)^2$
$= x^2 - 6xy + 9y^2 + 4x - 12y + 4$

(10) $(x + 2y - 4)^2$
$= x^2 + 4xy + 4y^2 - 8x - 16y + 16$

(11) $(x + 2)(x - 3)(x - 5)$
$= x^3 - 6x^2 - x + 30$

(12) $(x + y - 2)(x + y + 4)$
$= x^2 + 2xy + y^2 + 2x + 2y - 8$

(13) $(x + 2)(x - 3)(x + 4)$
$= x^3 + 3x^2 - 10x - 24$

(14) $(x + 1)(x - 4)(x - 5)$
$= x^3 - 8x^2 + 11x + 20$

(15) $(x^2 + 4x + 3)(x^2 - 4x + 3)$
$= x^4 - 10x^2 + 9$

(16) $(x + y + 4)(x + y + 3)$
$= x^2 + 2xy + y^2 + 7x + 7y + 12$

(17) $(x + 1)(x - 1)(x^2 + 1)$
$= x^4 - 1$

(18) $(x + 2y - 1)^2$
$= x^2 + 4xy + 4y^2 - 2x - 4y + 1$

(19) $(x^2 + 3x - 3)(x^2 - 3x - 3)$
$= x^4 - 15x^2 + 9$

(20) $(x + 3)(x - 3)(x^2 + 9)$
$= x^4 - 81$