式の展開 3項・工夫（20問）　版I

なまえ：＿＿＿＿＿＿＿＿＿＿＿＿　　日づけ：＿＿＿＿＿＿

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

(2) $(x - 3y + 1)^2 =$

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

(4) $(x + y + 3)(x + y - 7) =$

(5) $(x + y + 3)(x + y - 5) =$

(6) $(x + 3)(x - 4)(x - 5) =$

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

(8) $(x + y + 1)(x + y + 3) =$

(9) $(x + 2)(x + 3)(x + 4) =$

(10) $(x + y + 5)^2 =$

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

(12) $(x + y - 6)(x + y - 2) =$

(13) $(x^2 + 3x + 1)(x^2 - 3x + 1) =$

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

(15) $(x + 3y + 1)^2 =$

(16) $(x + y + 5)(x + y - 3) =$

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

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

(19) $(x - y - 1)^2 =$

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

式の展開 3項・工夫（20問）　版I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) $(x^2 + 2x - 1)(x^2 - 2x - 1)$
$= x^4 - 6x^2 + 1$

(2) $(x - 3y + 1)^2$
$= x^2 - 6xy + 9y^2 + 2x - 6y + 1$

(3) $(x + 4)(x - 4)(x^2 + 16)$
$= x^4 - 256$

(4) $(x + y + 3)(x + y - 7)$
$= x^2 + 2xy + y^2 - 4x - 4y - 21$

(5) $(x + y + 3)(x + y - 5)$
$= x^2 + 2xy + y^2 - 2x - 2y - 15$

(6) $(x + 3)(x - 4)(x - 5)$
$= x^3 - 6x^2 - 7x + 60$

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

(8) $(x + y + 1)(x + y + 3)$
$= x^2 + 2xy + y^2 + 4x + 4y + 3$

(9) $(x + 2)(x + 3)(x + 4)$
$= x^3 + 9x^2 + 26x + 24$

(10) $(x + y + 5)^2$
$= x^2 + 2xy + y^2 + 10x + 10y + 25$

(11) $(x + 2)(x - 4)(x + 5)$
$= x^3 + 3x^2 - 18x - 40$

(12) $(x + y - 6)(x + y - 2)$
$= x^2 + 2xy + y^2 - 8x - 8y + 12$

(13) $(x^2 + 3x + 1)(x^2 - 3x + 1)$
$= x^4 - 7x^2 + 1$

(14) $(x^2 + 4x + 2)(x^2 - 4x + 2)$
$= x^4 - 12x^2 + 4$

(15) $(x + 3y + 1)^2$
$= x^2 + 6xy + 9y^2 + 2x + 6y + 1$

(16) $(x + y + 5)(x + y - 3)$
$= x^2 + 2xy + y^2 + 2x + 2y - 15$

(17) $(x + 2)(x - 4)(x + 4)$
$= x^3 + 2x^2 - 16x - 32$

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

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

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