式の展開 3項・工夫（20問）　版M

なまえ：＿＿＿＿＿＿＿＿＿＿＿＿　　日づけ：＿＿＿＿＿＿

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

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

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

(4) $(x + 1)(x + 3)(x + 4) =$

(5) $(x + 5)(x - 5)(x^2 + 25) =$

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

(7) $(x + y - 4)(x + y + 6) =$

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

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

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

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

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

(13) $(x + y - 1)(x + y - 3) =$

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

(15) $(x + y - 7)(x + y + 1) =$

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

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

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

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

(20) $(x + 2)(x + 3)(x + 5) =$

式の展開 3項・工夫（20問）　版M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) $(x + 3)(x - 3)(x^2 + 9)$
$= x^4 - 81$

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

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

(4) $(x + 1)(x + 3)(x + 4)$
$= x^3 + 8x^2 + 19x + 12$

(5) $(x + 5)(x - 5)(x^2 + 25)$
$= x^4 - 625$

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

(7) $(x + y - 4)(x + y + 6)$
$= x^2 + 2xy + y^2 + 2x + 2y - 24$

(8) $(x - 3)(x - 5)(x + 5)$
$= x^3 - 3x^2 - 25x + 75$

(9) $(x^2 + 4x + 5)(x^2 - 4x + 5)$
$= x^4 - 6x^2 + 25$

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

(11) $(x^2 + x - 3)(x^2 - x - 3)$
$= x^4 - 7x^2 + 9$

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

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

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

(15) $(x + y - 7)(x + y + 1)$
$= x^2 + 2xy + y^2 - 6x - 6y - 7$

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

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

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

(19) $(x + y - 7)(x + y - 2)$
$= x^2 + 2xy + y^2 - 9x - 9y + 14$

(20) $(x + 2)(x + 3)(x + 5)$
$= x^3 + 10x^2 + 31x + 30$