因数分解 発展（20問）　版E

なまえ：＿＿＿＿＿＿＿＿＿＿　　日づけ：＿＿＿＿＿＿

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

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

(3) $18x^2 + 15x - 18 =$

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

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

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

(7) $45x^2 - 45x - 50 =$

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

(9) $x^4 - 20x^2 + 64 =$

(10) $20x^2 - 60x - 35 =$

(11) $x^2 - y^2 + 10y - 25 =$

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

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

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

(15) $x^4 - 26x^2 + 25 =$

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

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

(18) $9x^2 + 12x - 45 =$

(19) $x^2 - 5xy + 6y^2 - 5x + 11y + 4 =$

(20) $(x + y)^2 + 3(x + y) - 10 =$

因数分解 発展（20問）　版Eの答え

※ 答えの中に、まだ分解できる因数が残っていないかを確かめてください。

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

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

(3) $18x^2 + 15x - 18$
$= 3(2x + 3)(3x - 2)$

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

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

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

(7) $45x^2 - 45x - 50$
$= 5(3x - 5)(3x + 2)$

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

(9) $x^4 - 20x^2 + 64$
$= (x - 4)(x - 2)(x + 2)(x + 4)$

(10) $20x^2 - 60x - 35$
$= 5(2x - 7)(2x + 1)$

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

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

(13) $x^4 - 10x^2 + 9$
$= (x - 3)(x - 1)(x + 1)(x + 3)$

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

(15) $x^4 - 26x^2 + 25$
$= (x - 5)(x - 1)(x + 1)(x + 5)$

(16) $x^4 + 4x^2 - 5$
$= (x - 1)(x + 1)(x^2 + 5)$

(17) $(x + y)^2 + 4(x + y) - 5$
$= (x + y - 1)(x + y + 5)$

(18) $9x^2 + 12x - 45$
$= 3(x + 3)(3x - 5)$

(19) $x^2 - 5xy + 6y^2 - 5x + 11y + 4$
$= (x - 3y - 4)(x - 2y - 1)$

(20) $(x + y)^2 + 3(x + y) - 10$
$= (x + y - 2)(x + y + 5)$