因数分解 発展（20問）　版Q

なまえ：＿＿＿＿＿＿＿＿＿＿＿＿　　日づけ：＿＿＿＿＿＿

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

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

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

(4) $16x^2 + 16x - 140 =$

(5) $(x + y)^2 + 10(x + y) + 21 =$

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

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

(8) $20x^2 + 60x - 35 =$

(9) $x^4 - 13x^2 + 36 =$

(10) $x^2 - 9y^2 + 7x + 3y + 12 =$

(11) $x^2 - xy - 6y^2 - 7x - 4y + 10 =$

(12) $x^2 - xy - 2y^2 + 5x - 7y + 4 =$

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

(14) $(x + y)^2 - 13(x + y) + 42 =$

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

(16) $12x^2 - 26x + 12 =$

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

(18) $4x^2 + 18x - 70 =$

(19) $x^4 - 10x^2 - 96 =$

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

因数分解 発展（20問）　版Q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) $x^2 - y^2 + 4y - 4$
$= (x - y + 2)(x + y - 2)$

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

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

(4) $16x^2 + 16x - 140$
$= 4(2x - 5)(2x + 7)$

(5) $(x + y)^2 + 10(x + y) + 21$
$= (x + y + 3)(x + y + 7)$

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

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

(8) $20x^2 + 60x - 35$
$= 5(2x - 1)(2x + 7)$

(9) $x^4 - 13x^2 + 36$
$= (x - 3)(x - 2)(x + 2)(x + 3)$

(10) $x^2 - 9y^2 + 7x + 3y + 12$
$= (x - 3y + 4)(x + 3y + 3)$

(11) $x^2 - xy - 6y^2 - 7x - 4y + 10$
$= (x - 3y - 5)(x + 2y - 2)$

(12) $x^2 - xy - 2y^2 + 5x - 7y + 4$
$= (x - 2y + 1)(x + y + 4)$

(13) $(x + y)^2 - 5(x + y) - 14$
$= (x + y - 7)(x + y + 2)$

(14) $(x + y)^2 - 13(x + y) + 42$
$= (x + y - 7)(x + y - 6)$

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

(16) $12x^2 - 26x + 12$
$= 2(2x - 3)(3x - 2)$

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

(18) $4x^2 + 18x - 70$
$= 2(x + 7)(2x - 5)$

(19) $x^4 - 10x^2 - 96$
$= (x - 4)(x + 4)(x^2 + 6)$

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

free-print.net ｜ 因数分解の問題プリント 発展 版Q ｜ 学校・塾での配布OK