

解答

1. 式の展開 (レベル4・和の二乗) 1

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|---------------------------|---------------------------|
| (1) $a^2 - 14ab + 49b^2$ | (2) $x^2 - 2x + 1$ |
| (3) $x^2 - 6xy + 9y^2$ | (4) $a^2 + 16a + 64$ |
| (5) $a^2 - 18ab + 81b^2$ | (6) $x^2 - 18xy + 81y^2$ |
| (7) $a^2 + 6a + 9$ | (8) $x^2 + 6x + 9$ |
| (9) $a^2 - 14ab + 49b^2$ | (10) $x^2 + 16xy + 64y^2$ |
| (11) $a^2 - 4a + 4$ | (12) $x^2 + 10x + 25$ |
| (13) $a^2 - 12ab + 36b^2$ | (14) $x^2 - 10xy + 25y^2$ |
| (15) $x^2 - 10x + 25$ | (16) $a^2 - 14a + 49$ |
| (17) $x^2 - 10xy + 25y^2$ | (18) $a^2 - 8ab + 16b^2$ |
| (19) $x^2 - 18x + 81$ | (20) $x^2 - 4xy + 4y^2$ |
| (21) $a^2 + 14a + 49$ | (22) $a^2 + 18ab + 81b^2$ |
| (23) $x^2 - 14xy + 49y^2$ | (24) $a^2 - 2a + 1$ |
| (25) $x^2 - 10x + 25$ | (26) $a^2 - 10ab + 25b^2$ |
| (27) $x^2 + 8xy + 16y^2$ | (28) $x^2 + 6x + 9$ |
| (29) $a^2 + 18ab + 81b^2$ | (30) $a^2 + 8a + 16$ |

2. 式の展開 (レベル4・和の二乗) 2

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|---------------------------|---------------------------|
| (1) $x^2 - 14xy + 49y^2$ | (2) $a^2 + 14ab + 49b^2$ |
| (3) $x^2 + 14x + 49$ | (4) $x^2 + 14xy + 49y^2$ |
| (5) $a^2 + 18a + 81$ | (6) $a^2 - 2ab + b^2$ |
| (7) $x^2 - 10xy + 25y^2$ | (8) $a^2 + 16a + 64$ |
| (9) $a^2 - 8ab + 16b^2$ | (10) $x^2 + 2xy + y^2$ |
| (11) $x^2 + 14x + 49$ | (12) $a^2 - 18a + 81$ |
| (13) $x^2 - 4xy + 4y^2$ | (14) $a^2 + 10ab + 25b^2$ |
| (15) $x^2 - 6x + 9$ | (16) $a^2 - 10a + 25$ |
| (17) $a^2 - 14ab + 49b^2$ | (18) $x^2 + 14xy + 49y^2$ |
| (19) $x^2 + 10x + 25$ | (20) $a^2 + 8a + 16$ |
| (21) $x^2 - 4xy + 4y^2$ | (22) $x^2 + 6x + 9$ |
| (23) $a^2 - 12ab + 36b^2$ | (24) $x^2 + 18xy + 81y^2$ |
| (25) $a^2 - 4a + 4$ | (26) $a^2 + 16ab + 64b^2$ |
| (27) $x^2 - 16x + 64$ | (28) $a^2 + 12a + 36$ |
| (29) $a^2 - 4ab + 4b^2$ | (30) $x^2 + 6x + 9$ |

3. 式の展開 (レベル4・和の二乗) 3

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|---------------------------|---------------------------|
| (1) $a^2 - 4a + 4$ | (2) $a^2 - 8ab + 16b^2$ |
| (3) $x^2 + 10x + 25$ | (4) $a^2 - 6a + 9$ |
| (5) $a^2 + 14ab + 49b^2$ | (6) $x^2 + 8xy + 16y^2$ |
| (7) $a^2 - 4a + 4$ | (8) $x^2 - 16x + 64$ |
| (9) $a^2 + 10ab + 25b^2$ | (10) $a^2 + 2a + 1$ |
| (11) $x^2 + 18xy + 81y^2$ | (12) $x^2 - 10x + 25$ |
| (13) $a^2 - 4a + 4$ | (14) $a^2 + 18ab + 81b^2$ |
| (15) $x^2 + 18x + 81$ | (16) $x^2 - 12xy + 36y^2$ |
| (17) $a^2 - 10a + 25$ | (18) $a^2 - 18ab + 81b^2$ |
| (19) $x^2 - 14xy + 49y^2$ | (20) $x^2 + 2x + 1$ |
| (21) $a^2 - 4ab + 4b^2$ | (22) $a^2 - 2a + 1$ |
| (23) $x^2 - 16xy + 64y^2$ | (24) $x^2 - 6x + 9$ |
| (25) $a^2 - 14ab + 49b^2$ | (26) $a^2 - 14a + 49$ |
| (27) $x^2 + 4x + 4$ | (28) $x^2 - 16xy + 64y^2$ |
| (29) $a^2 - 4ab + 4b^2$ | (30) $a^2 + 8a + 16$ |

4. 式の展開 (レベル4・和と差の積) 1

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|--------------------|--------------------|
| (1) $x^2 - y^2$ | (2) $a^2 - 16$ |
| (3) $a^2 - 81b^2$ | (4) $x^2 - 81$ |
| (5) $a^2 - 1$ | (6) $a^2 - 25b^2$ |
| (7) $x^2 - 49$ | (8) $x^2 - 25y^2$ |
| (9) $a^2 - 16$ | (10) $a^2 - 25b^2$ |
| (11) $x^2 - 9$ | (12) $x^2 - 9y^2$ |
| (13) $a^2 - 25$ | (14) $a^2 - 36b^2$ |
| (15) $x^2 - 81$ | (16) $x^2 - 81y^2$ |
| (17) $a^2 - 25b^2$ | (18) $x^2 - 9$ |
| (19) $x^2 - 25y^2$ | (20) $a^2 - 16b^2$ |
| (21) $a^2 - 64$ | (22) $x^2 - 1$ |
| (23) $x^2 - 9y^2$ | (24) $a^2 - 49$ |
| (25) $x^2 - 36$ | (26) $x^2 - 36y^2$ |
| (27) $a^2 - 9b^2$ | (28) $x^2 - 36$ |
| (29) $x^2 - 25y^2$ | (30) $a^2 - 4b^2$ |

5. 式の展開 (レベル4・和と差の積) 2

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|--------------------|--------------------|
| (1) $x^2 - 49$ | (2) $x^2 - 81y^2$ |
| (3) $a^2 - 4b^2$ | (4) $x^2 - 16$ |
| (5) $a^2 - 1$ | (6) $a^2 - 9b^2$ |
| (7) $x^2 - 1$ | (8) $x^2 - 49y^2$ |
| (9) $a^2 - 9$ | (10) $a^2 - 9b^2$ |
| (11) $x^2 - 16$ | (12) $a^2 - 1$ |
| (13) $a^2 - b^2$ | (14) $x^2 - 36y^2$ |
| (15) $a^2 - 36$ | (16) $a^2 - 81b^2$ |
| (17) $x^2 - 64$ | (18) $x^2 - 64y^2$ |
| (19) $a^2 - 64b^2$ | (20) $x^2 - 4$ |
| (21) $x^2 - 16y^2$ | (22) $a^2 - 9b^2$ |
| (23) $a^2 - 9$ | (24) $x^2 - 25$ |
| (25) $a^2 - 81b^2$ | (26) $a^2 - 1$ |
| (27) $x^2 - 81$ | (28) $x^2 - y^2$ |
| (29) $a^2 - 81b^2$ | (30) $a^2 - 64$ |

6. 式の展開 (レベル4・和と差の積) 3

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|--------------------|--------------------|
| (1) $x^2 - 9$ | (2) $a^2 - b^2$ |
| (3) $a^2 - 9$ | (4) $x^2 - 9$ |
| (5) $a^2 - 16b^2$ | (6) $x^2 - 64y^2$ |
| (7) $x^2 - 64$ | (8) $a^2 - 49b^2$ |
| (9) $a^2 - 9$ | (10) $x^2 - 9$ |
| (11) $x^2 - 16y^2$ | (12) $a^2 - 4b^2$ |
| (13) $a^2 - 81$ | (14) $x^2 - 9$ |
| (15) $a^2 - 9b^2$ | (16) $a^2 - 16$ |
| (17) $x^2 - y^2$ | (18) $a^2 - 4b^2$ |
| (19) $x^2 - 9$ | (20) $x^2 - 36y^2$ |
| (21) $a^2 - 49b^2$ | (22) $x^2 - 4$ |
| (23) $x^2 - 81y^2$ | (24) $a^2 - 25$ |
| (25) $a^2 - 81b^2$ | (26) $x^2 - 81$ |
| (27) $x^2 - 64y^2$ | (28) $a^2 - 4b^2$ |
| (29) $x^2 - 25$ | (30) $a^2 - 16$ |

7. 式の展開 (レベル4・2パターンのもとめ) 1

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|---------------------------|---------------------------|
| (1) $x^2 - 25y^2$ | (2) $x^2 + 14x + 49$ |
| (3) $a^2 - 14ab + 49b^2$ | (4) $x^2 - 2xy + y^2$ |
| (5) $a^2 - 4b^2$ | (6) $x^2 - 6x + 9$ |
| (7) $a^2 + 18ab + 81b^2$ | (8) $x^2 - 36$ |
| (9) $a^2 - 14a + 49$ | (10) $x^2 - 14x + 49$ |
| (11) $a^2 + 8ab + 16b^2$ | (12) $x^2 + 8xy + 16y^2$ |
| (13) $a^2 - 49$ | (14) $x^2 - 9y^2$ |
| (15) $x^2 - 25$ | (16) $x^2 + 2x + 1$ |
| (17) $a^2 - 9$ | (18) $x^2 - 64y^2$ |
| (19) $a^2 + 16a + 64$ | (20) $x^2 + 18xy + 81y^2$ |
| (21) $a^2 - 9b^2$ | (22) $x^2 - 25$ |
| (23) $x^2 + 12x + 36$ | (24) $a^2 - 49$ |
| (25) $a^2 - 14ab + 49b^2$ | (26) $x^2 - 49y^2$ |
| (27) $a^2 + 14a + 49$ | (28) $x^2 - 16xy + 64y^2$ |
| (29) $x^2 - 4$ | (30) $x^2 + 14x + 49$ |

8. 式の展開 (レベル4・2パターンのもとめ) 2

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|---------------------------|---------------------------|
| (1) $a^2 + 12ab + 36b^2$ | (2) $a^2 - 16$ |
| (3) $a^2 + 8a + 16$ | (4) $a^2 - 64b^2$ |
| (5) $x^2 - 25y^2$ | (6) $x^2 - 2xy + y^2$ |
| (7) $x^2 - 16$ | (8) $a^2 - b^2$ |
| (9) $a^2 - 16ab + 64b^2$ | (10) $a^2 + 8a + 16$ |
| (11) $x^2 - 18x + 81$ | (12) $a^2 - 14ab + 49b^2$ |
| (13) $a^2 - 4a + 4$ | (14) $x^2 - 25y^2$ |
| (15) $x^2 + 10xy + 25y^2$ | (16) $a^2 - 25$ |
| (17) $x^2 - 14x + 49$ | (18) $a^2 - 36b^2$ |
| (19) $a^2 + 6ab + 9b^2$ | (20) $x^2 - 4y^2$ |
| (21) $a^2 - 1$ | (22) $x^2 + 4xy + 4y^2$ |
| (23) $x^2 + 8x + 16$ | (24) $a^2 - 4b^2$ |
| (25) $a^2 + 4a + 4$ | (26) $a^2 - 16ab + 64b^2$ |
| (27) $x^2 - 16x + 64$ | (28) $a^2 - 4a + 4$ |
| (29) $x^2 - 16$ | (30) $a^2 + 16ab + 64b^2$ |

9. 式の展開 (レベル4・2パターンのもとめ) 3

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|---------------------------|---------------------------|
| (1) $x^2 - 14x + 49$ | (2) $a^2 + 8a + 16$ |
| (3) $x^2 - 12xy + 36y^2$ | (4) $a^2 + 12ab + 36b^2$ |
| (5) $a^2 - 6a + 9$ | (6) $x^2 + 2xy + y^2$ |
| (7) $x^2 - 16y^2$ | (8) $a^2 - 9b^2$ |
| (9) $x^2 - 16x + 64$ | (10) $a^2 + 2ab + b^2$ |
| (11) $x^2 - 9$ | (12) $x^2 - 4y^2$ |
| (13) $a^2 - 36b^2$ | (14) $x^2 - 64$ |
| (15) $a^2 - 25$ | (16) $x^2 + 14xy + 49y^2$ |
| (17) $a^2 - 4b^2$ | (18) $x^2 + 10x + 25$ |
| (19) $x^2 - y^2$ | (20) $a^2 + 14a + 49$ |
| (21) $a^2 - 9$ | (22) $a^2 - 25b^2$ |
| (23) $a^2 + 14ab + 49b^2$ | (24) $x^2 - 25$ |
| (25) $x^2 - 25y^2$ | (26) $x^2 + 16x + 64$ |
| (27) $x^2 + 2xy + y^2$ | (28) $a^2 - 10ab + 25b^2$ |
| (29) $a^2 - 2a + 1$ | (30) $a^2 - 1$ |

10. 式の展開 (レベル4・2パターンのもとめ) 4

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|---------------------------|---------------------------|
| (1) $x^2 + 12x + 36$ | (2) $a^2 - 8ab + 16b^2$ |
| (3) $a^2 - 12a + 36$ | (4) $x^2 - 8x + 16$ |
| (5) $a^2 - 81b^2$ | (6) $a^2 - 18ab + 81b^2$ |
| (7) $x^2 - 25y^2$ | (8) $x^2 - 6xy + 9y^2$ |
| (9) $a^2 - 36$ | (10) $x^2 - 36$ |
| (11) $x^2 + 4x + 4$ | (12) $a^2 - 81b^2$ |
| (13) $a^2 - 64$ | (14) $a^2 + 2a + 1$ |
| (15) $x^2 - 16$ | (16) $a^2 - 4ab + 4b^2$ |
| (17) $x^2 + 12xy + 36y^2$ | (18) $x^2 - 25y^2$ |
| (19) $a^2 - 25b^2$ | (20) $a^2 - 18a + 81$ |
| (21) $x^2 - 49$ | (22) $a^2 - 16ab + 64b^2$ |
| (23) $a^2 - 9$ | (24) $a^2 - 16b^2$ |
| (25) $x^2 - 4y^2$ | (26) $a^2 - 36$ |
| (27) $x^2 - 81$ | (28) $a^2 - b^2$ |
| (29) $x^2 - 9y^2$ | (30) $x^2 + 4xy + 4y^2$ |

11. 式の展開 (レベル4・2パターンのもとめ) 5

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|---------------------------|---------------------------|
| (1) $a^2 - 4a + 4$ | (2) $a^2 - 6ab + 9b^2$ |
| (3) $x^2 - 16$ | (4) $x^2 + 10x + 25$ |
| (5) $a^2 - 49b^2$ | (6) $a^2 + 2a + 1$ |
| (7) $a^2 - 4$ | (8) $a^2 - 8ab + 16b^2$ |
| (9) $x^2 - 1$ | (10) $a^2 - 64b^2$ |
| (11) $x^2 - 18x + 81$ | (12) $x^2 - 2xy + y^2$ |
| (13) $a^2 - 8a + 16$ | (14) $x^2 - 4y^2$ |
| (15) $a^2 - 9$ | (16) $a^2 + 18ab + 81b^2$ |
| (17) $x^2 + 2xy + y^2$ | (18) $x^2 - 4x + 4$ |
| (19) $a^2 - 18a + 81$ | (20) $x^2 - 9$ |
| (21) $x^2 - 10xy + 25y^2$ | (22) $x^2 + 18x + 81$ |
| (23) $x^2 - 4y^2$ | (24) $a^2 - 36$ |
| (25) $a^2 - 9b^2$ | (26) $a^2 - 6a + 9$ |
| (27) $x^2 - 49$ | (28) $a^2 + 4ab + 4b^2$ |
| (29) $x^2 + 18x + 81$ | (30) $x^2 - 2xy + y^2$ |

12. 式の展開 (レベル4・2パターンのもとめ) 6

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|---------------------------|---------------------------|
| (1) $a^2 - 18ab + 81b^2$ | (2) $x^2 - 18x + 81$ |
| (3) $a^2 - 14a + 49$ | (4) $a^2 - 18ab + 81b^2$ |
| (5) $x^2 - 64y^2$ | (6) $a^2 - 25$ |
| (7) $a^2 - 4b^2$ | (8) $x^2 - 6x + 9$ |
| (9) $a^2 - 2a + 1$ | (10) $x^2 + 12xy + 36y^2$ |
| (11) $x^2 + 8x + 16$ | (12) $x^2 - 4$ |
| (13) $x^2 - 81y^2$ | (14) $a^2 - 12ab + 36b^2$ |
| (15) $x^2 + 18xy + 81y^2$ | (16) $a^2 - 25b^2$ |
| (17) $x^2 - 49$ | (18) $a^2 - 4$ |
| (19) $x^2 - 18x + 81$ | (20) $x^2 - 49y^2$ |
| (21) $a^2 + 6a + 9$ | (22) $a^2 + 12ab + 36b^2$ |
| (23) $x^2 - 12x + 36$ | (24) $a^2 - 9b^2$ |
| (25) $x^2 - 14xy + 49y^2$ | (26) $a^2 - 9$ |
| (27) $x^2 - 64y^2$ | (28) $x^2 - 9$ |
| (29) $a^2 - 6ab + 9b^2$ | (30) $a^2 - 4$ |