

平方根 $\langle (a+b)(a-b)/(a \pm b)^2 \rangle$ No.1 の解答

1. 次の式を簡単にせよ。

(1) $(2\sqrt{3} + \sqrt{2})^2$

答. $14 + 4\sqrt{6}$

(2) $(3\sqrt{2} + 3)^2$

答. $27 + 18\sqrt{2}$

(3) $(2 + \sqrt{2})^2$

答. $6 + 4\sqrt{2}$

(4) $(2 + \sqrt{3})(2 - \sqrt{3})$

答. 1

(5) $(\sqrt{2} + 2)^2$

答. $6 + 4\sqrt{2}$

(6) $(3\sqrt{3} - \sqrt{2})(3\sqrt{3} + \sqrt{2})$

答. 25

(7) $(3 - \sqrt{2})^2$

答. $11 - 6\sqrt{2}$

(8) $(\sqrt{2} + \sqrt{3})(\sqrt{2} - \sqrt{3})$

答. -1

(9) $(\sqrt{3} - \sqrt{5})(\sqrt{3} + \sqrt{5})$

答. -2

(10) $(\sqrt{12} - \sqrt{5})(\sqrt{12} + \sqrt{5})$

答. 7

平方根 $\langle (a+b)(a-b)/(a \pm b)^2 \rangle$ No.2 の解答

1. 次の式を簡単にせよ。

(1) $(\sqrt{5} - 3)(\sqrt{5} + 3)$

答. -4

(2) $(3 - \sqrt{2})(3 + \sqrt{2})$

答. 7

(3) $(1 - 2\sqrt{3})(1 + 2\sqrt{3})$

答. -11

(4) $(\sqrt{12} - \sqrt{45})(\sqrt{12} + \sqrt{45})$

答. -33

(5) $(\sqrt{12} + \sqrt{2})^2$

答. $14 + 4\sqrt{6}$

(6) $(\sqrt{27} + 3\sqrt{2})(\sqrt{27} - 3\sqrt{2})$

答. 9

(7) $(3\sqrt{5} - \sqrt{2})(3\sqrt{5} + \sqrt{2})$

答. 43

(8) $(\sqrt{3} - 2)(\sqrt{3} + 2)$

答. -1

(9) $(\sqrt{8} + \sqrt{27})^2$

答. $35 + 12\sqrt{6}$

(10) $(\sqrt{5} - \sqrt{3})(\sqrt{5} + \sqrt{3})$

答. 2

平方根 $\langle (a+b)(a-b)/(a \pm b)^2 \rangle$ No.3 の解答

1. 次の式を簡単にせよ。

(1) $(1+2\sqrt{3})(1-2\sqrt{3})$

答. -11

(2) $(\sqrt{2}+\sqrt{3})(\sqrt{2}-\sqrt{3})$

答. -1

(3) $(\sqrt{5}+\sqrt{3})^2$

答. $8+2\sqrt{15}$

(4) $(\sqrt{2}-\sqrt{3})^2$

答. $5-2\sqrt{6}$

(5) $(\sqrt{2}+\sqrt{5})(\sqrt{2}-\sqrt{5})$

答. -3

(6) $(1-\sqrt{2})^2$

答. $3-2\sqrt{2}$

(7) $(\sqrt{2}-2)(\sqrt{2}+2)$

答. -2

(8) $(2\sqrt{2}-1)^2$

答. $9-4\sqrt{2}$

(9) $(\sqrt{27}-\sqrt{5})^2$

答. $32-6\sqrt{15}$

(10) $(\sqrt{3}+\sqrt{2})^2$

答. $5+2\sqrt{6}$

平方根 $\langle (a+b)(a-b)/(a \pm b)^2 \rangle$ No.4 の解答

1. 次の式を簡単にせよ。

(1) $(3\sqrt{3} - 1)(3\sqrt{3} + 1)$

答. 26

(2) $(2\sqrt{2} + 2)^2$

答. $12 + 8\sqrt{2}$

(3) $(3 + 2\sqrt{2})(3 - 2\sqrt{2})$

答. 1

(4) $(\sqrt{18} - 2\sqrt{3})^2$

答. $30 - 12\sqrt{6}$

(5) $(\sqrt{5} + \sqrt{3})(\sqrt{5} - \sqrt{3})$

答. 2

(6) $(\sqrt{2} + 1)^2$

答. $3 + 2\sqrt{2}$

(7) $(3 + 2\sqrt{2})^2$

答. $17 + 12\sqrt{2}$

(8) $(\sqrt{2} - 3)^2$

答. $11 - 6\sqrt{2}$

(9) $(1 + 3\sqrt{2})(1 - 3\sqrt{2})$

答. -17

(10) $(1 - \sqrt{2})^2$

答. $3 - 2\sqrt{2}$

平方根 $\langle (a+b)(a-b)/(a \pm b)^2 \rangle$ No.5 の解答

1. 次の式を簡単にせよ。

(1) $(1 + \sqrt{8})^2$

答. $9 + 4\sqrt{2}$

(2) $(\sqrt{2} + 1)(\sqrt{2} - 1)$

答. 1

(3) $(\sqrt{3} - \sqrt{8})^2$

答. $11 - 4\sqrt{6}$

(4) $(\sqrt{3} - 3\sqrt{5})(\sqrt{3} + 3\sqrt{5})$

答. -42

(5) $(\sqrt{2} - \sqrt{3})^2$

答. $5 - 2\sqrt{6}$

(6) $(3\sqrt{3} - \sqrt{2})^2$

答. $29 - 6\sqrt{6}$

(7) $(\sqrt{8} - \sqrt{5})^2$

答. $13 - 4\sqrt{10}$

(8) $(\sqrt{2} - \sqrt{3})^2$

答. $5 - 2\sqrt{6}$

(9) $(\sqrt{2} - 1)^2$

答. $3 - 2\sqrt{2}$

(10) $(3\sqrt{3} - 3)(3\sqrt{3} + 3)$

答. 18