1. 次の式を簡単にせよ。

(1) $\left(\sqrt{18}-\sqrt{3}\right)\left(\sqrt{2}-\sqrt{27}\right)$

答. $15-10\sqrt{6}$

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

答. $8+2\sqrt{15}$

(3) $\left(\sqrt{2}-1\right)\left(\sqrt{2}-3\right)$

答. $5-4\sqrt{2}$

(4) $\left(\sqrt{2}-\sqrt{3}\right)\left(\sqrt{2}+\sqrt{27}\right)$

答. $-7+2\sqrt{6}$

(5) $\left(\sqrt{12}+\sqrt{8}\right)^2$

答. $20+8\sqrt{6}$

(6) $\left(\sqrt{3}+\sqrt{5}\right)\left(\sqrt{3}-\sqrt{45}\right)$

答. $-12-2\sqrt{15}$

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

答. $5-2\sqrt{6}$

(8) $\left(\sqrt{3}-2\sqrt{5}\right)\left(\sqrt{12}-\sqrt{45}\right)$

答. $36-7\sqrt{15}$

(9) $\left(\sqrt{18}-3\sqrt{3}\right)\left(\sqrt{2}-2\sqrt{3}\right)$

答. $24-9\sqrt{6}$

(10) $\left(3\sqrt{2}-\sqrt{12}\right)\left(\sqrt{2}-\sqrt{3}\right)$

答. $12-5\sqrt{6}$

平方根＜（ａ±ｂ）（ｃ±ｄ）＞ No.2 の解答

1. 次の式を簡単にせよ。

(1) $\left(\sqrt{2}-1\right)\left(\sqrt{2}-2\right)$

答. $4-3\sqrt{2}$

(2) $\left(\sqrt{2}-3\sqrt{5}\right)\left(\sqrt{18}+\sqrt{5}\right)$

答. $-9-8\sqrt{10}$

(3) $\left(3-\sqrt{18}\right)\left(3+\sqrt{2}\right)$

答. $3-6\sqrt{2}$

(4) $\left(\sqrt{45}-\sqrt{2}\right)\left(3\sqrt{5}+\sqrt{2}\right)$

答. 43

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

答. $4-\sqrt{2}$

(6) $\left(\sqrt{3}-\sqrt{2}\right)\left(\sqrt{27}-\sqrt{8}\right)$

答. $13-5\sqrt{6}$

(7) $\left(\sqrt{2}-\sqrt{3}\right)\left(\sqrt{8}-\sqrt{3}\right)$

答. $7-3\sqrt{6}$

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

答. $5-2\sqrt{6}$

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

答. $7-4\sqrt{2}$

(10) $\left(2\sqrt{2}-1\right)\left(\sqrt{2}-1\right)$

答. $5-3\sqrt{2}$

1. 次の式を簡単にせよ。

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

答. -2

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

答. 1

(3) $\left(2\sqrt{2}-\sqrt{45}\right)\left(\sqrt{2}+\sqrt{20}\right)$

答. $-26+\sqrt{10}$

(4) $\left(\sqrt{2}-1\right)^{2}$

答. $3-2\sqrt{2}$

(5) $\left(1-\sqrt{2}\right)\left(1+\sqrt{2}\right)$

答. -1

(6) $\left(\sqrt{3}+1\right)\left(\sqrt{3}+3\right)$

答. $6+4\sqrt{3}$

(7) $\left(3\sqrt{2}+3\right)\left(\sqrt{18}+1\right)$

答. $21+12\sqrt{2}$

(8) $\left(2\sqrt{2}-\sqrt{20}\right)\left(\sqrt{2}+\sqrt{5}\right)$

答. -6

(9) $\left(2\sqrt{2}+\sqrt{12}\right)\left(\sqrt{2}-\sqrt{3}\right)$

答. -2

(10) $\left(\sqrt{2}-2\right)\left(2\sqrt{2}-1\right)$

答. $6-5\sqrt{2}$

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1. 次の式を簡単にせよ。

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

答. $4+2\sqrt{3}$

(2) $\left(\sqrt{5}-\sqrt{3}\right)\left(\sqrt{5}+\sqrt{27}\right)$

答. $-4+2\sqrt{15}$

(3) $\left(\sqrt{5}+\sqrt{3}\right)\left(3\sqrt{5}+\sqrt{3}\right)$

答. $18+4\sqrt{15}$

(4) $\left(3\sqrt{2}-1\right)\left(\sqrt{2}-1\right)$

答. $7-4\sqrt{2}$

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

答. $4+\sqrt{10}$

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

答. $-1+\sqrt{6}$

(7) $\left(\sqrt{2}-\sqrt{27}\right)\left(\sqrt{2}-\sqrt{3}\right)$

答. $11-4\sqrt{6}$

(8) $\left(\sqrt{3}-\sqrt{5}\right)\left(\sqrt{3}-\sqrt{45}\right)$

答. $18-4\sqrt{15}$

(9) $\left(2-\sqrt{12}\right)\left(3-\sqrt{3}\right)$

答. $12-8\sqrt{3}$

(10) $\left(3\sqrt{5}+2\sqrt{3}\right)\left(2\sqrt{5}-\sqrt{3}\right)$

答. $24+\sqrt{15}$

1. 次の式を簡単にせよ。

(1) $\left(1-\sqrt{2}\right)^2$

答. $3-2\sqrt{2}$

(2) $\left(1+\sqrt{5}\right)\left(1-\sqrt{5}\right)$

答. -4

(3) $\left(2\sqrt{3}-3\sqrt{2}\right)\left(2\sqrt{3}-\sqrt{2}\right)$

答. $18-8\sqrt{6}$

(4) $\left(\sqrt{8}-\sqrt{5}\right)\left(2\sqrt{2}+\sqrt{20}\right)$

答. $-2+2\sqrt{10}$

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

答. $-3+8\sqrt{2}$

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

答. $-5+5\sqrt{6}$

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

答. -2

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

答. $4+2\sqrt{3}$

(9) $\left(\sqrt{20}-2\sqrt{3}\right)\left(\sqrt{5}-\sqrt{3}\right)$

答. $16-4\sqrt{15}$

(10) $\left(\sqrt{12}+3\sqrt{2}\right)\left(\sqrt{3}-\sqrt{18}\right)$

答. $-12-3\sqrt{6}$