

平方根＜分配法則＞ No. 1の解答

1. 次の式を簡単にせよ。

(1)  $\sqrt{12}(1 + 2\sqrt{3})$

答.  $2\sqrt{3} + 12$

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

答.  $\sqrt{2} - 2$

(3)  $\sqrt{18}(\sqrt{18} - \sqrt{3})$

答.  $18 - 3\sqrt{6}$

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

答.  $2\sqrt{6} + 4$

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

答.  $2\sqrt{2} + 6\sqrt{6}$

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

答.  $4 + \sqrt{2}$

(7)  $\sqrt{12}(\sqrt{27} - \sqrt{2})$

答.  $18 - 2\sqrt{6}$

(8)  $2\sqrt{2}(\sqrt{18} + 1)$

答.  $12 + 2\sqrt{2}$

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

答.  $4\sqrt{6} + 6$

(10)  $\sqrt{12}(2\sqrt{2} - 2)$

答.  $4\sqrt{6} - 4\sqrt{3}$

平方根＜分配法則＞ No. 2の解答

1. 次の式を簡単にせよ。

(1)  $\sqrt{2}(1 - \sqrt{5})$

答.  $\sqrt{2} - \sqrt{10}$

(2)  $3\sqrt{3}(\sqrt{2} - \sqrt{12})$

答.  $3\sqrt{6} - 18$

(3)  $\sqrt{3}(\sqrt{12} - \sqrt{2})$

答.  $6 - \sqrt{6}$

(4)  $\sqrt{18}(\sqrt{2} - 1)$

答.  $6 - 3\sqrt{2}$

(5)  $\sqrt{3}(\sqrt{8} + \sqrt{5})$

答.  $2\sqrt{6} + \sqrt{15}$

(6)  $\sqrt{45}(\sqrt{2} - \sqrt{3})$

答.  $3\sqrt{10} - 3\sqrt{15}$

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

答.  $4\sqrt{6} - 2\sqrt{15}$

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

答.  $\sqrt{15} - \sqrt{3}$

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

答.  $4 + \sqrt{10}$

(10)  $\sqrt{2}(\sqrt{27} - \sqrt{2})$

答.  $3\sqrt{6} - 2$

## 平方根＜分配法則＞ No. 3の解答

1. 次の式を簡単にせよ。

(1)  $\sqrt{27}(\sqrt{27} - \sqrt{8})$

答.  $27 - 6\sqrt{6}$

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

答.  $2\sqrt{15} + \sqrt{6}$

(3)  $\sqrt{3}(\sqrt{27} - \sqrt{20})$

答.  $9 - 2\sqrt{15}$

(4)  $3\sqrt{2}(\sqrt{5} - \sqrt{2})$

答.  $3\sqrt{10} - 6$

(5)  $\sqrt{3}(\sqrt{18} - 3\sqrt{3})$

答.  $3\sqrt{6} - 9$

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

答.  $4 - 2\sqrt{6}$

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

答.  $2\sqrt{3} + \sqrt{15}$

(8)  $\sqrt{5}(1 - \sqrt{2})$

答.  $\sqrt{5} - \sqrt{10}$

(9)  $2\sqrt{3}(3\sqrt{3} + \sqrt{18})$

答.  $18 + 6\sqrt{6}$

(10)  $\sqrt{8}(\sqrt{2} - \sqrt{5})$

答.  $4 - 2\sqrt{10}$

平方根＜分配法則＞ No. 4の解答

1. 次の式を簡単にせよ。

(1)  $\sqrt{12}(\sqrt{2} - \sqrt{3})$

答.  $2\sqrt{6} - 6$

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

答.  $3\sqrt{6} - \sqrt{3}$

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

答.  $3 - \sqrt{3}$

(4)  $\sqrt{3}(\sqrt{2} - \sqrt{20})$

答.  $\sqrt{6} - 2\sqrt{15}$

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

答.  $2 - \sqrt{2}$

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

答.  $3 - 2\sqrt{15}$

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

答.  $2\sqrt{3} + 3\sqrt{6}$

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

答.  $6\sqrt{6} + 6\sqrt{3}$

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

答.  $3\sqrt{15} - 3\sqrt{6}$

(10)  $2\sqrt{3}(1 - 2\sqrt{2})$

答.  $2\sqrt{3} - 4\sqrt{6}$

平方根＜分配法則＞ No. 5の解答

1. 次の式を簡単にせよ。

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

答.  $\sqrt{10} - \sqrt{15}$

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

答.  $6 - \sqrt{6}$

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

答.  $3 + \sqrt{6}$

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

答.  $\sqrt{3} - 2\sqrt{6}$

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

答.  $9 + 2\sqrt{6}$

(6)  $3\sqrt{5}(\sqrt{2} + 3)$

答.  $3\sqrt{10} + 9\sqrt{5}$

(7)  $2\sqrt{5}(2 + \sqrt{18})$

答.  $4\sqrt{5} + 6\sqrt{10}$

(8)  $2\sqrt{3}(\sqrt{18} + 2)$

答.  $6\sqrt{6} + 4\sqrt{3}$

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

答.  $\sqrt{6} - 2\sqrt{2}$

(10)  $\sqrt{8}(1 + \sqrt{3})$

答.  $2\sqrt{2} + 2\sqrt{6}$