

問題番号  
09M0207\_02  
レベル  
☆★★

うんな進学塾  
中3 第2章 平方根  
⑦平方根の計算（加減） No.2 解答

授業動画QR



1. 次の計算をしなさい。

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

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

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

$$(4) 7\sqrt{6} + 3\sqrt{2} - 5\sqrt{6} + 2\sqrt{2}$$

$$(5) \sqrt{50} - \sqrt{18} \\ = 5\sqrt{2} - 3\sqrt{2} = 2\sqrt{2}$$

$$(6) \sqrt{12} + \sqrt{27} \\ = 2\sqrt{3} + 3\sqrt{3} = 5\sqrt{3}$$

$$(7) \sqrt{45} - \sqrt{12} - \sqrt{20} \\ = 3\sqrt{5} - 2\sqrt{3} - 2\sqrt{5} = \sqrt{5} - 2\sqrt{3}$$

$$(8) \sqrt{32} + \sqrt{50} - \sqrt{81} \\ 4\sqrt{2} + 5\sqrt{2} - 9 = 9\sqrt{2} - 9$$

$$(9) 2\sqrt{20} - \sqrt{50} - \sqrt{8} + \sqrt{45} \\ = 4\sqrt{5} - 5\sqrt{2} - 2\sqrt{2} + 3\sqrt{5} = 7\sqrt{5} - 7\sqrt{2}$$

$$(10) 3\sqrt{18} - 2\sqrt{27} + \sqrt{12} - \sqrt{32} \\ 9\sqrt{2} - 6\sqrt{3} + 2\sqrt{3} - 4\sqrt{2} = 5\sqrt{2} - 4\sqrt{3}$$

$$(11) \frac{4}{\sqrt{3}} - 2\sqrt{12} \\ = \frac{4\sqrt{3}}{\sqrt{3} \times \sqrt{3}} - 2\sqrt{2^2 \times 3} = \frac{4\sqrt{3}}{3} - 4\sqrt{3} = -\frac{8\sqrt{3}}{3}$$

$$(12) \frac{6}{\sqrt{2}} - \frac{\sqrt{18}}{\sqrt{3}} \\ = \frac{6\sqrt{2}}{\sqrt{2} \times \sqrt{2}} - \frac{3\sqrt{2} \times \sqrt{3}}{\sqrt{3} \times \sqrt{3}} = 3\sqrt{2} - \sqrt{6}$$

(1) $7\sqrt{2}$	(2) $4\sqrt{5}$	(3) $4\sqrt{3}$	(4) $2\sqrt{6} + 5\sqrt{2}$
(5) $2\sqrt{2}$	(6) $5\sqrt{3}$	(7) $\sqrt{5} - 2\sqrt{3}$	(8) $9\sqrt{2} - 9$
(9) $7\sqrt{5} - 7\sqrt{2}$	(10) $5\sqrt{2} - 4\sqrt{3}$	(11) $-\frac{8\sqrt{3}}{3}$	(12) $3\sqrt{2} - \sqrt{6}$