

問題番号 09M0207_01 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.1 解答	授業動画QR 
----------------------------------	---	---

1. 次の計算をしなさい。

$$(1) 2\sqrt{3} + 4\sqrt{3} = 6\sqrt{3}$$

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

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

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

$$(5) \sqrt{32} - \sqrt{8} = 4\sqrt{2} - 2\sqrt{2} = 2\sqrt{2}$$

$$(6) \sqrt{27} + \sqrt{48} = 3\sqrt{3} + 4\sqrt{3} = 7\sqrt{3}$$

$$(7) \sqrt{45} - \sqrt{20} + \sqrt{80} \\ = 3\sqrt{5} - 2\sqrt{5} + 4\sqrt{5} = 5\sqrt{5}$$

$$(8) \sqrt{12} + \sqrt{75} - \sqrt{81} \\ = 2\sqrt{3} + 5\sqrt{3} - 9 = 7\sqrt{3} - 9$$

$$(9) 2\sqrt{8} + \sqrt{27} - \sqrt{32} - \sqrt{12} \\ = 4\sqrt{2} + 3\sqrt{3} - 4\sqrt{2} - 2\sqrt{3} = \sqrt{3}$$

$$(10) 2\sqrt{18} - 2\sqrt{12} + \sqrt{32} - \sqrt{27} \\ = 6\sqrt{2} - 4\sqrt{3} + 4\sqrt{2} - 3\sqrt{3} = 10\sqrt{2} - 7\sqrt{3}$$

$$(11) \frac{2}{\sqrt{3}} + 2\sqrt{27} = \frac{2 \times \sqrt{3}}{\sqrt{3} \times \sqrt{3}} + 6\sqrt{3} \\ = \frac{2\sqrt{3}}{3} + 6\sqrt{3} = \frac{20\sqrt{3}}{3}$$

$$(12) \frac{4}{\sqrt{2}} - \frac{\sqrt{6}}{\sqrt{3}} = \frac{4 \times \sqrt{2}}{\sqrt{2} \times \sqrt{2}} - \frac{\sqrt{6} \times \sqrt{3}}{\sqrt{3} \times \sqrt{3}} \\ = \frac{4\sqrt{2}}{2} - \frac{3\sqrt{2}}{3} = 2\sqrt{2} - \sqrt{2} = \sqrt{2}$$

(1) $6\sqrt{3}$	(2) $2\sqrt{6}$	(3) $8\sqrt{2}$	(4) $-2\sqrt{5} + 6\sqrt{2}$
(5) $2\sqrt{2}$	(6) $7\sqrt{3}$	(7) $5\sqrt{5}$	(8) $7\sqrt{3} - 9$
(9) $\sqrt{3}$	(10) $10\sqrt{2} - 7\sqrt{3}$	(11) $\frac{20\sqrt{3}}{3}$	(12) $\sqrt{2}$