

平方根の計算④

1 次の計算をなさい。

(1) $(3\sqrt{5} - 2)(\sqrt{10} - 3)$

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

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

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

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

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

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

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

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

(10) $(\sqrt{10} - \sqrt{6})(\sqrt{10} + \sqrt{6})$

(11) $(4 + \sqrt{3})(4 - \sqrt{3})$

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

2 次の計算をなさい。

(1) $\sqrt{12} + \sqrt{3}(\sqrt{6} - 2)$

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

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

(4) $\sqrt{32} - \sqrt{150} + \sqrt{18}(2 - \sqrt{3})$

(5) $\sqrt{5}(2\sqrt{3} - 3) - \sqrt{45}(\sqrt{3} - 1)$

(6) $\sqrt{6}(5\sqrt{2} - \sqrt{18}) - \frac{24}{\sqrt{3}}$