

3年 計算の復習 【平方根の計算】 (教科書 P67 解答は P285)

_____年 _____組 _____番 氏名 _____

1. 次の式を計算をなさい。【乗法・除法】

(1) $\sqrt{2} \times \sqrt{13}$

(2) $\sqrt{42} \div \sqrt{7}$

(3) $\sqrt{24} \times \sqrt{6}$

(4) $\sqrt{50} \div \sqrt{2}$

(5) $2\sqrt{5} \times 4\sqrt{2}$

(6) $4\sqrt{3} \times (-\sqrt{15})$

(7) $3\sqrt{5} \times \sqrt{\frac{5}{2}}$

(8) $9\sqrt{6} \div 3\sqrt{2}$

(9) $8\sqrt{15} \div 2\sqrt{10}$

(10) $\frac{\sqrt{21}}{3} \div \frac{\sqrt{7}}{6}$

2. 次の式を計算をなさい。【加法・減法】

(1) $3\sqrt{5} + 4\sqrt{5}$

(2) $\sqrt{7} - 6\sqrt{7}$

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

(4) $5\sqrt{2} + 4\sqrt{6} - 8\sqrt{2} + \sqrt{6}$

(5) $\sqrt{63} + \sqrt{7}$

(6) $\sqrt{50} - \sqrt{18}$

(7) $\sqrt{18} - 7\sqrt{2} + \sqrt{32}$

(8) $\sqrt{45} + 4\sqrt{5} - \sqrt{20}$

(9) $\frac{6}{\sqrt{2}} + \sqrt{8}$

(10) $\sqrt{24} - \frac{18}{\sqrt{6}}$

(11) $\frac{9\sqrt{15}}{5} + \sqrt{\frac{3}{5}}$

(12) $\sqrt{32} - \frac{4}{\sqrt{2}} + \sqrt{50}$

3. 次の式を計算をなさい。【いろいろな計算】

(1) $\sqrt{24} + \sqrt{2} \times \sqrt{3}$

(2) $\sqrt{8} \times \sqrt{6} - \sqrt{18} \div \sqrt{6}$

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

(4) $(\sqrt{72} - \sqrt{56}) \div \sqrt{8}$

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

(6) $(8 - \sqrt{3})(7 + \sqrt{3})$

(7) $(\sqrt{5} - 1)(\sqrt{5} - 6)$

(8) $(\sqrt{10} + 9)(\sqrt{10} - 9)$

(9) $(\sqrt{19} - \sqrt{13})(\sqrt{19} + \sqrt{13})$

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

(11) $(\sqrt{7} + 3)^2$

(12) $(\sqrt{6} - \sqrt{2})^2$

(13) $(2\sqrt{3} - 1)(2\sqrt{3} + 4)$

(14) $(3\sqrt{2} - 5)^2$

(15) $(2\sqrt{6} + \sqrt{2})(2\sqrt{6} - \sqrt{2})$

(16) $\left(\frac{4}{\sqrt{3}} + \sqrt{3}\right)\left(\frac{4}{\sqrt{3}} - \sqrt{3}\right)$

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

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

(19) $(\sqrt{5} - 1)^2 + \frac{10}{\sqrt{5}}$