

3年 平方根の計算 (解答)

1. 次の計算をなさい。

- (1) $-2\sqrt{2} + \sqrt{18}$ (福島) $\frac{\sqrt{2}}{1}$
- (2) $\sqrt{12} + 5\sqrt{3}$ (栃木, 沖縄) $\frac{7\sqrt{3}}{1}$
- (3) $5\sqrt{5} - \sqrt{20}$ (埼玉) $\frac{3\sqrt{5}}{1}$
- (4) $6\sqrt{3} - \sqrt{12}$ (富山) $\frac{4\sqrt{3}}{1}$
- (5) $\sqrt{12} + \sqrt{3}$ (長野) $\frac{3\sqrt{3}}{1}$
- (6) $\sqrt{54} - 8\sqrt{6}$ (大阪) $\frac{-5\sqrt{6}}{1}$
- (7) $3\sqrt{2} + \sqrt{32}$ (大阪) $\frac{7\sqrt{2}}{1}$
- (8) $\sqrt{18} - \sqrt{8}$ (兵庫) $\frac{\sqrt{2}}{1}$
- (9) $5\sqrt{3} - \sqrt{27}$ (鳥取, 佐賀, 長崎) $\frac{2\sqrt{3}}{1}$
- (10) $\sqrt{48} - \frac{9}{\sqrt{3}}$ (東京) $\frac{\sqrt{3}}{1}$
- (11) $\frac{12}{\sqrt{6}} - \sqrt{54}$ (神奈川) $\frac{-\sqrt{6}}{1}$
- (12) $\sqrt{27} - \frac{6}{\sqrt{3}}$ (新潟) $\frac{\sqrt{3}}{1}$
- (13) $\sqrt{12} - \frac{1}{\sqrt{3}}$ (石川) $\frac{5\sqrt{3}}{3}$
- (14) $\sqrt{32} + \frac{6}{\sqrt{2}}$ (静岡) $\frac{7\sqrt{2}}{1}$
- (15) $\sqrt{8} - \frac{2}{\sqrt{2}}$ (徳島) $\frac{\sqrt{2}}{1}$

- (16) $\sqrt{2} \times \sqrt{3} + \sqrt{6}$ (北海道) $\frac{2\sqrt{6}}{1}$
- (17) $(\sqrt{5} + 4)^2$ (青森) $\frac{21 + 8\sqrt{5}}{1}$
- (18) $(\sqrt{3} + 1)(\sqrt{3} + 2)$ (岩手) $\frac{5 + 3\sqrt{3}}{1}$
- (19) $\sqrt{6}(\sqrt{2} + \sqrt{3}) - 2\sqrt{3}$ (秋田) $\frac{3\sqrt{2}}{1}$
- (20) $\sqrt{5}(\sqrt{5} - 3) + \sqrt{20}$ (山形) $\frac{5 - \sqrt{5}}{1}$
- (21) $\sqrt{72} - \sqrt{6} \times \sqrt{3}$ (茨城) $\frac{3\sqrt{2}}{1}$
- (22) $(\sqrt{2} + \sqrt{5})(\sqrt{5} - 2\sqrt{2})$ (千葉) $\frac{1 - \sqrt{10}}{1}$
- (23) $(\sqrt{3} + 5)(3 - \sqrt{3})$ (福井) $\frac{12 - 2\sqrt{3}}{1}$
- (24) $\sqrt{20} + \sqrt{15} \div \sqrt{3}$ (山梨) $\frac{3\sqrt{5}}{1}$
- (25) $(4 + \sqrt{5})(4 - \sqrt{5})$ (高知) $\frac{11}{1}$
- (26) $\sqrt{2}(\sqrt{27} - \sqrt{12})$ (宮崎) $\frac{\sqrt{6}}{1}$
- (27) $(\sqrt{5} - 3)(\sqrt{5} + 4) - \sqrt{45}$ (滋賀) $\frac{-7 - 2\sqrt{5}}{1}$
- (28) $(\sqrt{3} - 1)(\sqrt{3} + 4) - \sqrt{12}$ (岡山) $\frac{-1 + \sqrt{3}}{1}$
- (29) $\sqrt{3}(\sqrt{6} + \sqrt{3}) - \frac{8}{\sqrt{2}}$ (愛媛) $\frac{3 - \sqrt{2}}{1}$
- (30) $(2 - \sqrt{3})^2 + \frac{12}{\sqrt{3}}$ (長崎) $\frac{7}{1}$