

$$1. \sqrt{1\frac{1}{2}} \times 2\sqrt{3}$$

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

$$3. \text{已知}\sqrt{2} = 1.414, \sqrt{3} = 1.732, \text{求}\frac{4}{\sqrt{3}-\sqrt{2}}\text{的值}$$

$$4. \sqrt{32} - \sqrt{6} \times \sqrt{3}$$

$$5. \frac{1}{\sqrt{3}-\sqrt{2}}$$

$$6. \frac{\sqrt{3}+1}{\sqrt{3}-1} - \frac{\sqrt{3}-1}{\sqrt{3}+1}$$

$$7. \sqrt{50} + \sqrt{32} - \sqrt{18}$$

$$8. (2\sqrt{3} + 5\sqrt{2})(3\sqrt{3} - 7\sqrt{2})$$

$$9. 3\sqrt{8ab} + \sqrt[3]{54ab} - (2\sqrt{4a})(5\sqrt{2b}) + \sqrt[3]{16ab}$$

$$10. \text{已知}\sqrt{2} = 1.414, \sqrt{3} = 1.732, \text{求}\frac{\sqrt{8}+\sqrt{6}}{\sqrt{2}}\text{的值}$$

$$11. \frac{20+3\sqrt{10}}{\sqrt{10}}$$

$$12. \frac{6}{\sqrt{12}} + \frac{1}{\sqrt{3}+2} - 3\sqrt{\frac{1}{3}}$$

$$13. \sqrt{(x + \frac{1}{x})^2 - (x - \frac{1}{x})^2}$$

$$14. \frac{\sqrt{108}}{3} + \sqrt{147} - 2\sqrt{48}$$

$$15. \text{已知}\sqrt{2} = 1.414, \text{求}\sqrt{32} - \sqrt{8} + \frac{3}{\sqrt{2}}\text{的值}$$

$$16. (2\sqrt{3} - 3\sqrt{2})^2$$

$$17. \frac{\sqrt{66} \times \sqrt{65}}{\sqrt{106} \times \sqrt{165}}$$

$$18. 5\sqrt{8} - 6\sqrt{2} + 3\sqrt{18}$$

$$19. \frac{\sqrt{2}+1}{\sqrt{3}-1} - \frac{3}{\sqrt{2}+1}$$

$$20. \text{已知}\sqrt{2} = 1.414, \sqrt{3} = 1.732, \sqrt{5} = 2.236$$

$$a) \frac{21}{\sqrt{8}} + \sqrt{5}$$

$$b) \frac{\sqrt{10}}{\sqrt{30}-\sqrt{6}}$$

$$21. \text{设} a = \frac{\sqrt{5}}{\sqrt{5}+2}, b = \frac{\sqrt{5}}{\sqrt{5}-2}, \text{求}$$

$$22. \sqrt{20} + \sqrt{48} - \sqrt{12} - \sqrt{5}$$

$$23. \frac{2}{\sqrt{6}+2}$$

$$24. \sqrt{8^2 - 2(7)(8) + 7^2}$$



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25.  $\sqrt{45} + \sqrt{125} - 2\sqrt{20}$

