

1 解答 (1)  $\frac{\sqrt{2}}{2}$  (2)  $\frac{5\sqrt{3}}{3}$  (3)  $\frac{\sqrt{30}}{5}$  (4)  $2\sqrt{6}$

$$(1) \frac{1}{\sqrt{2}} = \frac{1 \times \sqrt{2}}{\sqrt{2} \times \sqrt{2}} = \frac{\sqrt{2}}{2}$$

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

$$(3) \frac{\sqrt{6}}{\sqrt{5}} = \frac{\sqrt{6} \times \sqrt{5}}{\sqrt{5} \times \sqrt{5}} = \frac{\sqrt{30}}{5}$$

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

2 解答 (1)  $\frac{\sqrt{3}}{2}$  (2)  $\frac{5\sqrt{2}}{4}$  (3)  $\sqrt{5}$

$$(1) \frac{3}{2\sqrt{3}} = \frac{3 \times \sqrt{3}}{2\sqrt{3} \times \sqrt{3}} = \frac{3\sqrt{3}}{6} = \frac{\sqrt{3}}{2}$$

$$(2) \frac{5}{\sqrt{8}} = \frac{5}{2\sqrt{2}} = \frac{5 \times \sqrt{2}}{2\sqrt{2} \times \sqrt{2}} = \frac{5\sqrt{2}}{4}$$

$$(3) \frac{10}{\sqrt{20}} = \frac{10}{2\sqrt{5}} = \frac{5}{\sqrt{5}} = \frac{5 \times \sqrt{5}}{\sqrt{5} \times \sqrt{5}} = \frac{5\sqrt{5}}{5} = \sqrt{5}$$

3 解答 (1) 0.2236 (2) 4.242 (3) 0.4472 (4) 8.944 (5) 0.1414

$$(1) \frac{1}{\sqrt{20}} = \frac{1 \times \sqrt{20}}{\sqrt{20} \times \sqrt{20}} = \frac{\sqrt{20}}{20}$$

$$= \frac{4.472}{20}$$

$$(2) \sqrt{18} = 3\sqrt{2} = 3 \times 1.414 = 4.242$$

$$(3) \sqrt{0.2} = \sqrt{\frac{20}{100}} = \frac{\sqrt{20}}{10}$$

$$= \frac{4.472}{10}$$

$$= 0.4472$$

$$(4) \sqrt{80} = \sqrt{4 \times 20} = 2\sqrt{20} = 2 \times 4.472 = 8.944$$

$$(5) \frac{1}{\sqrt{50}} = \frac{1}{5\sqrt{2}} = \frac{\sqrt{2}}{5\sqrt{2} \times \sqrt{2}}$$

$$= \frac{\sqrt{2}}{10}$$

$$= \frac{1.414}{10}$$

$$= 0.1414$$

4 解答 (1) 70.71 (2) 0.7071 (3) 8.944 (4) 14.142 (5) 0.2236

$$(1) \sqrt{5000} = \sqrt{100 \times 50} = 10\sqrt{50} = 10 \times 7.071 = 70.71$$

$$(2) \sqrt{0.5} = \sqrt{\frac{50}{100}} = \frac{\sqrt{50}}{10}$$

$$= \frac{7.071}{10} = 0.7071$$

$$(3) \sqrt{80} = \sqrt{16 \times 5} = 4\sqrt{5} = 4 \times 2.236 = 8.944$$

$$(4) \sqrt{200} = \sqrt{4 \times 50} = 2\sqrt{50} = 2 \times 7.071 = 14.142$$

$$(5) \frac{1}{\sqrt{20}} = \frac{1}{2\sqrt{5}} = \frac{1 \times \sqrt{5}}{2\sqrt{5} \times \sqrt{5}} = \frac{\sqrt{5}}{10} = \frac{2.236}{10} = 0.2236$$