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

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

$= \dfrac{\sqrt{2}}{2}$

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

$= \dfrac{5\sqrt{3}}{3}$

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

$= \dfrac{\sqrt{30}}{5}$

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

$= \dfrac{12\sqrt{6}}{6}$

$= 2\sqrt{6}$

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

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

$= \dfrac{3\sqrt{3}}{6}$

$= \dfrac{\sqrt{3}}{2}$

(2)　$\dfrac{5}{\sqrt{8}} = \dfrac{5}{2\sqrt{2}}$

$= \dfrac{5 \times \sqrt{2}}{2\sqrt{2} \times \sqrt{2}}$

$= \dfrac{5\sqrt{2}}{4}$

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

$= \dfrac{5}{\sqrt{5}}$

$= \dfrac{5 \times \sqrt{5}}{\sqrt{5} \times \sqrt{5}}$

$= \dfrac{5\sqrt{5}}{5}$

$= \sqrt{5}$

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

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

$= \dfrac{\sqrt{20}}{20}$

$= 4.472 \div 20$

$= 0.2236$

(2) $\sqrt{18} = 3\sqrt{2}$

$= 3 \times 1.414$

$= 4.242$

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

$= \dfrac{\sqrt{20}}{10}$

$= 4.472 \div 10$

$= 0.4472$

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

$= 2\sqrt{20}$

$= 2 \times 4.472$

$= 8.944$

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

$= \dfrac{\sqrt{2}}{5\sqrt{2} \times \sqrt{2}}$

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

$= 1.414 \div 10$

$= 0.1414$

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) $\sqrt{0.5} = \sqrt{\dfrac{50}{100}} = \dfrac{\sqrt{50}}{10}$

$= 7.071 \div 10$

$= 0.7071$

(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) $\dfrac{1}{\sqrt{20}} = \dfrac{1}{2\sqrt{5}} = \dfrac{1 \times \sqrt{5}}{2\sqrt{5} \times \sqrt{5}} = \dfrac{\sqrt{5}}{10}$

$= 2.236 \div 10$

$= 0.2236$