

1 解答 (1) $9\sqrt{3}$ (2) $3\sqrt{2}$ (3) $6\sqrt{5}$ (4) $4\sqrt{2}$ (5) $5\sqrt{3}$

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

(1) $\sqrt{48} + \sqrt{75} = 4\sqrt{3} + 5\sqrt{3}$
 $= 9\sqrt{3}$

(2) $2\sqrt{8} - \sqrt{2} = 2 \times 2\sqrt{2} - \sqrt{2}$
 $= 4\sqrt{2} - \sqrt{2}$
 $= 3\sqrt{2}$

(3) $\sqrt{5} + \sqrt{20} + \sqrt{45} = \sqrt{5} + 2\sqrt{5} + 3\sqrt{5}$
 $= 6\sqrt{5}$

(4) $\sqrt{8} - \sqrt{18} + \sqrt{50} = 2\sqrt{2} - 3\sqrt{2} + 5\sqrt{2}$
 $= 4\sqrt{2}$

(5) $3\sqrt{48} - \sqrt{27} - 2\sqrt{12} = 3 \times 4\sqrt{3} - 3\sqrt{3} - 2 \times 2\sqrt{3}$
 $= 12\sqrt{3} - 3\sqrt{3} - 4\sqrt{3}$
 $= 5\sqrt{3}$

(6) $5\sqrt{6} - 2\sqrt{28} + \sqrt{63} - \sqrt{24} = 5\sqrt{6} - 2 \times 2\sqrt{7} + 3\sqrt{7} - 2\sqrt{6}$
 $= 5\sqrt{6} - 4\sqrt{7} + 3\sqrt{7} - 2\sqrt{6}$
 $= 3\sqrt{6} - \sqrt{7}$

2 解答 (1) $9\sqrt{2}$ (2) $-2\sqrt{6}$ (3) $3\sqrt{3}$ (4) $-\sqrt{7}$

(1) $5\sqrt{2} + 4\sqrt{2} = (5+4)\sqrt{2}$
 $= 9\sqrt{2}$

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

(3) $\sqrt{3} + \sqrt{12} = \sqrt{3} + 2\sqrt{3}$
 $= 3\sqrt{3}$

(4) $\sqrt{28} - \sqrt{63} = 2\sqrt{7} - 3\sqrt{7}$
 $= -\sqrt{7}$

3 解答 (1) $7\sqrt{3}$ (2) $3\sqrt{6}$ (3) $-\sqrt{2}$ (4) $5\sqrt{3} - 6\sqrt{5}$ (5) $-3\sqrt{2} + 2\sqrt{6}$

(1) $2\sqrt{3} + 5\sqrt{3} = (2+5)\sqrt{3}$

$= 7\sqrt{3}$

(2) $7\sqrt{6} - 4\sqrt{6} = (7-4)\sqrt{6}$

$= 3\sqrt{6}$

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

(4) $\sqrt{3} - 6\sqrt{5} + 4\sqrt{3} = (1+4)\sqrt{3} - 6\sqrt{5}$
 $= 5\sqrt{3} - 6\sqrt{5}$

(5) $\sqrt{2} - 3\sqrt{6} + 5\sqrt{6} - 4\sqrt{2} = (1-4)\sqrt{2} + (-3+5)\sqrt{6}$
 $= -3\sqrt{2} + 2\sqrt{6}$