

1 以下の問題を計算しなさい。

$$(1) \sqrt{3} \times \sqrt{7} - 4$$

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

$$(3) \sqrt{10} - \sqrt{2} \times \sqrt{5} + \sqrt{18}$$

$$(4) \sqrt{50} - 2\sqrt{27} \div \sqrt{3} \times \sqrt{2}$$

$$(5) 2\sqrt{5} \times \sqrt{4} - 3$$

$$(6) 4\sqrt{6} \div \sqrt{3} - 6$$

$$(7) \sqrt{21} - \sqrt{3} \times \sqrt{7} + \sqrt{12}$$

$$(8) \sqrt{72} - 3\sqrt{18} \div \sqrt{2} \times \sqrt{3}$$

$$(9) \sqrt{8} \times \sqrt{2} - 5$$

$$(10) 5\sqrt{10} \div \sqrt{5} - 7$$

解答

(1) $\sqrt{21} - 4$ (平方根の乗法と減算)

(2) $3\sqrt{4} - 5 = 6 - 5 = 1$ (平方根の除法と減算)

(3) $\sqrt{10} - \sqrt{10} + 3\sqrt{2} = 3\sqrt{2}$ (平方根の乗法と和)

(4) $\sqrt{50} - 2\sqrt{9} \times \sqrt{2} = \sqrt{50} - 6\sqrt{2} = 5\sqrt{2} - 6\sqrt{2} = -\sqrt{2}$ (平方根の乗法と減算)

(5) $2\sqrt{20} - 3 = 4\sqrt{5} - 3$ (平方根の乗法と減算)

(6) $4\sqrt{2} - 6$ (平方根の除法と減算)

(7) $\sqrt{21} - \sqrt{21} + 2\sqrt{3} = 2\sqrt{3}$ (平方根の乗法と和)

(8) $\sqrt{72} - 3\sqrt{9} \times \sqrt{3} = 6\sqrt{2} - 9\sqrt{3}$ (平方根の乗法と減算)

(9) $\sqrt{16} - 5 = 4 - 5 = -1$ (平方根の乗法と減算)

(10) $5\sqrt{2} - 7$ (平方根の除法と減算)