

例題 1 - 5

(1) $3\sqrt{2}$

(2) $45\sqrt{2}$

(3) 3

(4) $45\sqrt{2}$

< 解説 >

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

(2) $\sqrt{45} \times \sqrt{90} = 3\sqrt{5} \times 3\sqrt{10} = 9\sqrt{5} \times \sqrt{5} \times \sqrt{2} = 9 \times 5 \times \sqrt{2} = 45\sqrt{2}$

(別解) $\sqrt{45} \times \sqrt{90} = \sqrt{45} \times \sqrt{45} \times \sqrt{2} = 45\sqrt{2}$

(3) $\sqrt{18} \div \sqrt{2} = \sqrt{\frac{18}{2}} = \sqrt{9} = 3$

(4) $15 \div \sqrt{18} = \frac{15}{\sqrt{18}} = \frac{15}{3\sqrt{2}} = \frac{5}{\sqrt{2}} = \frac{5 \times \sqrt{2}}{\sqrt{2} \times \sqrt{2}} = \frac{5\sqrt{2}}{2}$

例題 4 - 1

(1) $\angle a = 35^\circ, \angle b = 75^\circ, \angle c = 70^\circ$

(2) $a \parallel d, b \parallel c$

< 解説 >

(1) 平行線の錯角は等しいので, $\angle a = 35^\circ$

平行線の同位角は等しいので, $\angle b = 75^\circ$

一直線の角は 180° より, $\angle c$ の対頂角は $180^\circ - (35^\circ + 75^\circ) = 70^\circ$

よって, $\angle c = 70^\circ$

(2) 同位角, または錯角が等しい 2 つの直線は平行になる.