

H28. 4. 15

訂正

式の値 2

$a = \sqrt{2}, b = -\sqrt{3}$ のとき、次の式の値を求めなさい。

(1) a^2 $(\sqrt{2})^2 = 2$

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

(3) $(-b)^3$ $(\sqrt{3})^3 = 3\sqrt{3}$

(4) $a^2 + b^2$ $2 + 3 = 5$

(5) $\frac{2a}{b}$ $-\frac{2\sqrt{2}}{\sqrt{3}} = -\frac{2\sqrt{6}}{3}$

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

(7) $ab^2 \times 2ab \div ab^2$ $\frac{ab^2 \times 2ab}{ab^2} = 2 \times \sqrt{2} \times (-\sqrt{3}) = -2\sqrt{6}$

(8) $a^2 - 2ab + b^2$ $(a-b)^2 = (\sqrt{2} + \sqrt{3})^2 = 5 + 2\sqrt{6}$

(9) $\frac{b}{a} - \frac{a}{b}$ $-\frac{\sqrt{3}}{\sqrt{2}} + \frac{\sqrt{2}}{\sqrt{3}} = -\frac{\sqrt{6}}{2} + \frac{\sqrt{6}}{3}$
 $= -\frac{3\sqrt{6}}{6} + \frac{2\sqrt{6}}{6}$
 $= -\frac{\sqrt{6}}{6}$