

中3 数学D 復習テスト解答 (3 学期-1)

復習 1-1

$$(1) a_2 = 7, a_3 = 12, a_4 = \boxed{17}$$

$$(2) a_2 = 5, a_3 = 8, a_4 = \boxed{13}$$

$$(3) a_2 = 4, a_3 = 5, a_4 = \boxed{\frac{29}{5}}$$

復習 1-2

(1) $a, 6, b$ がこの順に等差数列をなすので,

$$6 - a = b - 6 \quad \therefore \boxed{a + b = 12} \quad \cdots \cdots (i)$$

$b, a, 2$ がこの順に等比数列をなすので,

a, b は 0 ではなく,

$$\frac{a}{b} = \frac{2}{a} \quad \therefore \boxed{a^2 = 2b} \quad \cdots \cdots (ii)$$

が成り立つ.

(2) (i)より $b = 12 - a$ なので, (ii)に代入して

$$a^2 = 2(12 - a)$$

$$a^2 + 2a - 24 = 0$$

$$(a + 6)(a - 4) = 0$$

$$\therefore a = -6, 4$$

したがって, $\boxed{(a, b) = (-6, 18), (4, 8)}$.