

中3数学C 復習テスト解答 3学期-1

1

$$(1) a_2 = a_1 + 5 = 2 + 5 = 7$$

$$a_3 = a_2 + 5 = 7 + 5 = 12$$

$$a_4 = a_3 + 5 = 12 + 5 = \boxed{17}$$

$$(2) a_2 = a_1 + \frac{4}{a_1} = 2 + \frac{4}{2} = 4$$

$$a_3 = a_2 + \frac{4}{a_2} = 4 + \frac{4}{4} = 5$$

$$a_4 = a_3 + \frac{4}{a_3} = 5 + \frac{4}{5} = \boxed{\frac{29}{5}}$$

$$(3) a_2 = 2a_1 - 1 = 2 \times 3 - 1 = 5$$

$$a_3 = 2a_2 - 2 = 2 \times 5 - 2 = 8$$

$$a_4 = 2a_3 - 3 = 2 \times 8 - 3 = \boxed{13}$$

2

$$(1) \text{ 等差数列 } 2, 7, 12, 17, \dots \text{ の公差は } 7 - 2 = \boxed{5} \text{ なので、第 } n \text{ 項は}$$
$$2 + 5 \times (n - 1) = \boxed{5n - 3}$$

$$(2) \text{ 等比数列 } 5, 15, 45, 135, \dots \text{ の公比は } \frac{15}{5} = \boxed{3} \text{ なので、第 } n \text{ 項は}$$

$$\boxed{5 \times 3^{n-1}}$$