## 1 解答

[問1]  $a_1 = 66, \ a_2 = 1485$

[問2]  $\dfrac{12!}{2^n \cdot n! \cdot (12 - 2n)!}$

[問3]  1, 2, 3, 4

[問4]  5

## 2 解答

[問1]  (1)  24

(2)  $s = \dfrac{2}{7}, \ t = \dfrac{2}{7}$

(3)  $(2, 1)$

[問2]  (1)  $sg^2 + td$

(2)  $s = \dfrac{1}{2}, \ t = -1$

(3)  $s = \dfrac{eh^2 - df}{g^2 h^2 - d^2}, \ t = \dfrac{fg^2 - de}{g^2 h^2 - d^2}$

## 3 解答

[問1]  (証明略)

[問2]  $\dfrac{13}{12}\pi, \ \dfrac{19}{12}\pi$

[問3]  $m \leqq -2 - \sqrt{3}$ または $2 - \sqrt{3} \leqq m$

## 4 解答

[問1]  $(0, -2), \ (\pm\sqrt{3}, 1)$

[問2]  $y = \dfrac{1}{\sqrt{3}}x$

[問3]  $(-1, -1), \ (1, -1), \ \left(\dfrac{7}{4}, \dfrac{17}{16}\right)$

[問4]  $\dfrac{4}{3}\pi + 3\sqrt{3} - \dfrac{7}{3}$