

1 解答

[問 1] (1) $\frac{16}{33}$

(2) $\frac{n^2 - 12n + 66}{66}$

[問 2] (1) $2 \leq n \leq 8$

(2) 最小値は $\frac{5}{11}$ ($n = 6$), 最大値は $\frac{23}{33}$ ($n = 2$).

[問 3] $2 \leq m \leq 6$

2 解答

[問 1] $A(0,0)$, $B(17,0)$, $C(10,24)$

[問 2] $AB = 17$, $BC = 25$, $AC = 26$

[問 3] (1) 204

(2) $\frac{17}{2}r$

(3) 6

(4) (9, 6)

3 解答

[問 1] $a_1 = 1$, $b_1 = 0$, $a_2 = 2$, $b_2 = -1$, $a_3 = 3$, $b_3 = -2$

[問 2] $a_{n+1} = 2a_n + b_n$, $b_{n+1} = -a_n$

[問 3] $a_n = n$

4 解答

[問 1] (証明略)

[問 2] (証明略)

[問 3] $\log 2$

[問 4] (証明略)

[問 5] $\frac{\pi}{4}$