

1 解答

[設問 1] 論理変数 p, q, r および論理関数 $f(p, q, r), g(p, q, r)$ について

(1) $p = q = r = \text{F}$

(2)

p	q	r	$f(p, q, r)$	$g(p, q, r)$
F	F	F	F	T
F	F	T	F	F
F	T	F	F	F
F	T	T	T	F
T	F	F	F	F
T	F	T	T	F
T	T	F	T	F
T	T	T	T	T

(3) $g(p, q, r) = (p \wedge q \wedge r) \vee (\neg p \wedge \neg q \wedge \neg r)$ など.

[設問 2]

(1) f は全単射である. g は全単射でない. (理由略)

(2) 0

(3) 1

[設問 3]

(1) $f^{(3)}(x) = 2^3 e^{2x+3}$

(2) (証明略)

(3) $\log 2$

[設問 4]

(1) $0.1608 \leq p \leq 0.2392$

(2) $1608 \leq M \leq 2392$

(3) S 大学の学生で, 眼鏡をかけている学生の比率は 10% より大きいといえる.

2 解答

[設問 1] (1) $a[0] = 22, a[1] = 38, a[2] = 41, a[3] = 26, a[4] = 49, a[5] = 53, a[6] = 35.$

(2) $a[0] = 22, a[1] = 26, a[2] = 35, a[3] = 38, a[4] = 49, a[5] = 53, a[6] = 41.$

(3) $a[0] = 22, a[1] = 26, a[2] = 35, a[3] = 38, a[4] = 41, a[5] = 49, a[6] = 53.$

[設問 2] (理由略)