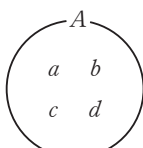
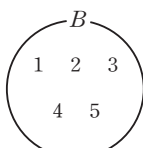
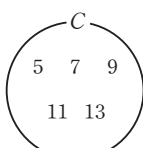
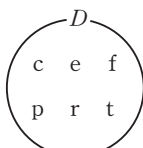
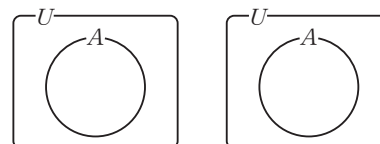


1 집합

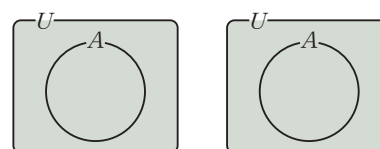
6 ~ 22쪽

- 001 ○ 002 ×
 003 ○ 004 ×
 005 ∉ 006 ∈
 007 ∈ 008 ∉
 009 $A = \{1, 2, 3, 4, 6, 12\}$
 010 $B = \{5, 10, 15, 20, 25, 30\}$
 011 $C = \{-3, 3\}$
 012 $D = \{2, 3, 5, 7, 11, 13\}$
 013 $A = \{x | x \text{는 } 30 \text{ 이하의 자연수}\}$
 014 $B = \{x | x \text{는 } 3 \text{의 배수}\}$
 015 $C = \{x | x \text{는 } 15 \text{의 양의 약수}\}$
 016 $D = \{x | x \text{는 } 20 \text{ 이하의 소수}\}$
 017  018 
 019  020 
 021 유 022 무
 023 무 024 유
 025 유 026 무
 027 $n(A) = 50$ 028 $n(B) = 6$
 029 $n(C) = 0$ 030 $n(D) = 1$
 031 2 032 3
 033 \subset 034 \subset
 035 $\not\subset$ 036 \subset
 037 $A \subset B$ 038 $B \subset A$
 039 $B \subset A$ 040 $A \subset B$
 041 $B \subset A$
 042 $\emptyset, \{1\}, \{7\}, \{1, 7\}$
 043 $\emptyset, \{1\}, \{3\}, \{9\}, \{1, 3\}, \{1, 9\}, \{3, 9\}, \{1, 3, 9\}$
 044 $\emptyset, \{2\}, \{3\}, \{5\}, \{2, 3\}, \{2, 5\}, \{3, 5\}, \{2, 3, 5\}$
 045 ○ 046 ○
 047 × 048 ×
 049 ○ 050 ○
 051 $A = B$ 052 $A = B$
 053 $A \neq B$ 054 $a = 3, b = 2$
 055 $a = 6, b = 5$ 056 $a = 5, b = -3$
 057 $\emptyset, \{1\}, \{3\}$
 058 $\emptyset, \{-1\}, \{0\}, \{1\}, \{-1, 0\}, \{-1, 1\}, \{0, 1\}$

- 059 $\emptyset, \{1\}, \{5\}, \{25\}, \{1, 5\}, \{1, 25\}, \{5, 25\}$
 060 8 061 32
 062 16 063 128
 064 64 065 256
 066 7 067 127
 068 255 069 16
 070 8 071 3
 072 64 073 32
 074 16 075 4
 076 8 077 32
 078 8 079 16
 080 $A \cup B = \{2, 4, 6, 8\}, A \cap B = \{2, 6\}$
 081 $A \cup B = \{a, b, c, d\}, A \cap B = \emptyset$
 082 $A \cup B = \{1, 3, 5, 7, 9, 15\}, A \cap B = \{1, 3, 5\}$
 083 $A \cup B = \{2, 3, 4, 5, 7\}, A \cap B = \{2, 5, 7\}$
 084 $A \cup B = \{2, 4, 6, 8, 9, 10, 12\}, A \cap B = \{4, 8\}$
 085 $A \cup B = \{1, 3, 4, 5, 9\}, A \cap B = \{3\}$
 086 ○ 087 ×
 088 × 089 ○
 090 ○ 091 $\{2, 4, 6, 8, 9\}$
 092 $\{1, 5, 7, 9\}$ 093 $\{4, 5, 7, 8, 9\}$
 094 $\{1, 3, 15, 17, 19\}$ 095 $\{9, 11, 17, 19\}$
 096 $\{7, 9, 11, 13, 17, 19\}$
 097 $A - B = \{5\}, B - A = \emptyset$
 098 $A - B = \{3, 8, 9\}, B - A = \{1, 7, 10\}$
 099 $A - B = \{c, f, g\}, B - A = \{a\}$
 100 $A - B = \emptyset, B - A = \{16\}$
 101 $A - B = \{2\}, B - A = \{1, 9\}$
 102 $A - B = \{3, 12, 15, 18\}, B - A = \{4, 5, 7, 8, 10\}$
 103 $\{4, 8, 12, 24\}$ 104 $\{8, 24\}$
 105 $\{4, 12\}$ 106 $\{1, 2, 3, 6\}$
 107 $\{1, 2, 3, 6, 8, 24\}$ 108 $\{8, 24\}$
 109 8 110 9
 111 6 112 1
 113 4 114 6
 115 $A \cap A^c \equiv \emptyset$

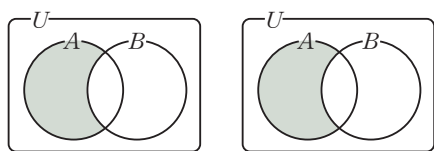


116 $A \cup A^c \equiv U$

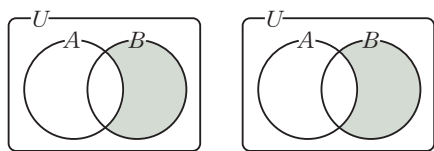




117 $A \cap B^c \equiv A - B$



118 $B - A \equiv B \cap A^c$



119 A

121 A

123 B

125 U

127 B

129 A

131 ×

133 ×

135 ○

120 A

122 ∅

124 U

126 ∅

128 U

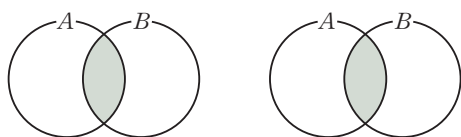
130 A^c

132 ○

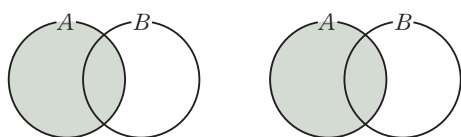
134 ×

136 ×

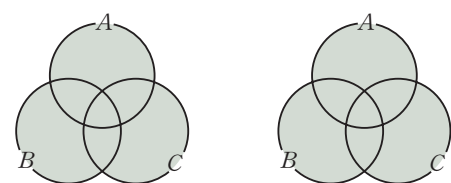
137 $A \cap B \equiv B \cap A$



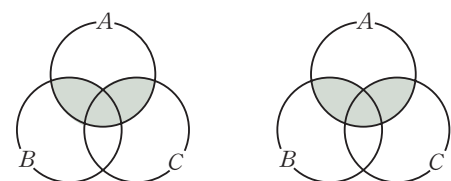
138 $A \cup (B \cap A) \equiv A$



139 $(A \cup B) \cup C \equiv A \cup (B \cup C)$



140 $A \cap (B \cup C) \equiv (A \cap B) \cup (A \cap C)$



141 U

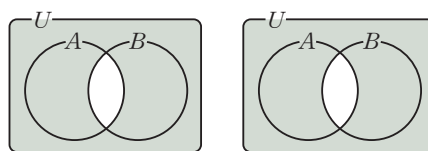
143 C

145 A, C

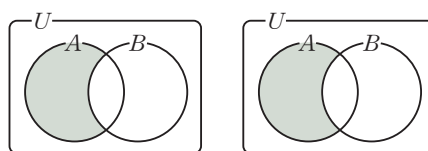
142 B

144 ∩, ∩

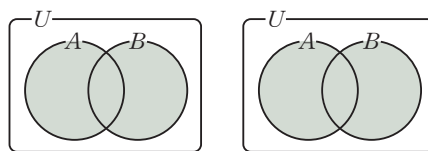
146 $(A \cap B)^c \equiv A^c \cup B^c$



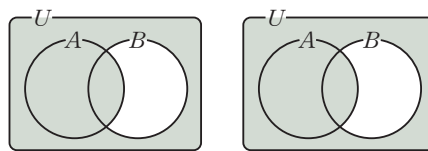
147 $(A^c \cup B)^c \equiv A \cap B^c$



148 $(A^c \cap B^c)^c \equiv A \cup B$



149 $(A^c \cap B)^c \equiv A \cup B^c$



150 ∩

152 B

154 A^c

156 ⊆

158 ∈, ⊇, ⊆

160 $A^c, A^c, \emptyset, A^c, A$

162 $B^c, B, B, \cap, \emptyset, B$

164 8

166 20

168 15

170 25

172 36

174 11

176 20

178 38

180 7

181 7

183 ②

185 ⑤

187 36

151 U

153 B^c

155 ∩

157 ⊇, ⊆

159 B, U, U

161 B, B, ∅, ∅

163 18

165 15

167 14

169 15

171 21

173 4

175 31

177 13

179 18

182 ④

184 16

186 ③

188 35

- 189 × 190 ○
 191 × 192 ×
 193 ○ 194 ×
 195 참 196 거짓
 197 참 198 거짓
 199 거짓 200 참
 201 {1, 3, 5, 7} 202 {4, 5, 6, 7, 8}
 203 {1, 4, 6, 8} 204 {1, 3}
 205 {3, 5, 6, 7, 8} 206 {1, 2, 6, 7, 8}
 207 {3, 4, 5} 208 {5}
 209 {2, 3, 5} 210 {1, 2, 8, 9, 10}
 211 {1, 3, 4} 212 {2, 3, 4, 5, 6, 8, 10}
 213 3은 홀수가 아니다. 214 $x \neq 2$ 그리고 $x \neq 4$
 215 $1 \in \{1, 3, 5\}$ 216 5는 소수가 아니다. (거짓)
 217 $\emptyset \subset \{1, 2, 3\}$ (참) 218 $2+7 \leq 9$ (참)
 219 $x \geq 2$ 220 $x < 2$ 또는 $x \geq 6$
 221 $x < 2$ 222 {4, 5, 6, 7}
 223 {4, 5} 224 {1, 4, 5, 6, 7, 8}
 225 가정: a, b 가 모두 홀수이다., 결론: $a+b$ 는 짝수이다.
 226 가정: $x=2$ 이다., 결론: $3x+2=10$ 이다.
 227 가정: $x>3$ 이다., 결론: $x>2$ 이다.
 228 가정: n 이 4의 배수이다., 결론: $2n$ 은 8의 배수이다.
 229 참 230 거짓
 231 거짓 232 참
 233 참 234 거짓
 235 참 236 거짓
 237 × 238 ○
 239 ○ 240 ×
 241 ○ 242 ○
 243 거짓 244 참
 245 참 246 거짓
 247 참
 248 어떤 자연수 x 에 대하여 $3x-2 \leq 0$ 이다. (거짓)
 249 모든 마름모는 정사각형이 아니다. (거짓)
 250 어떤 소수는 홀수가 아니다. (참)
 251 모든 실수 x 에 대하여 $x^2 \geq 0$ 이다. (참)
 252 모든 유리수 x, y 에 대하여 $xy \neq 2$ 이다. (거짓)
 253 역: $p \longrightarrow q$, 대우: $\sim p \longrightarrow \sim q$
 254 역: $\sim q \longrightarrow p$, 대우: $q \longrightarrow \sim p$
 255 역: $p \longrightarrow \sim q$, 대우: $\sim p \longrightarrow q$
 256 역: $\sim q \longrightarrow \sim p$, 대우: $q \longrightarrow p$

- 257 역: $x=3$ 이면 $x^2=9$ 이다.,
 대우: $x \neq 3$ 이면 $x^2 \neq 9$ 이다.
 258 역: 4의 양의 약수이면 8의 양의 약수이다.,
 대우: 4의 양의 약수가 아니면 8의 양의 약수가 아니다.
 259 역: 참, 대우: 거짓 260 역: 참, 대우: 거짓
 261 역: 거짓, 대우: 참 262 역: 거짓, 대우: 참
 263 역: 참, 대우: 참 264 역: 거짓, 대우: 참
 265 × 266 ○
 267 × 268 ○
 269 × 270 ○
 271 충분조건 272 필요조건
 273 필요조건 274 충분조건
 275 필요조건 276 필요충분조건
 277 필요조건 278 필요충분조건
 279 충분조건 280 필요조건
 281 필요충분조건 282 충분조건
 283 -2 또는 2 284 6
 285 $a \geq 2$ 286 $a \leq 3$
 287 1 288 $a \leq 6$
 289 홀수, 홀수, 1, 홀수 290 풀이 참조
 291 유리수, 2, 2, 2, 2 292 풀이 참조
 293 × 294 ○
 295 × 296 ○
 297 × 298 ○
 299 $\frac{3}{4}b^2, \frac{3}{4}b^2, \geq, \frac{3}{4}b^2, 0$
 300 풀이 참조
 301 $\frac{1}{2}(\sqrt{a}-\sqrt{b})^2, a=b$
 302 풀이 참조 303 2
 304 8 305 2
 306 6 307 9
 308 최댓값: $2\sqrt{2}$, 최솟값: $-2\sqrt{2}$
 309 최댓값: $2\sqrt{5}$, 최솟값: $-2\sqrt{5}$
 310 최댓값: $2\sqrt{13}$, 최솟값: $-2\sqrt{13}$
 311 18 312 20
 313 ④ 314 \neg, \supset
 315 9 316 ②
 317 \neg, \supset 318 8
 319 \supset, \supset 320 15

- 001 ○ 002 ×
 003 × 004 ○
 005 정의역: $\{1, 2, 3\}$, 공역: $\{a, b, c\}$, 치역: $\{a, b, c\}$
 006 정의역: $\{1, 2, 3\}$, 공역: $\{a, b, c, d\}$, 치역: $\{a, c\}$
 007 정의역: $\{1, 2, 3, 4\}$, 공역: $\{a, b, c\}$, 치역: $\{b, c\}$
 008 정의역: $\{1, 2, 3, 4\}$, 공역: $\{a, b, c, d\}$, 치역: $\{a, b, c\}$
 009 $\{-1\}$ 010 $\{-1, 1, 3\}$
 011 $\{-1, 0\}$ 012 $\{-1, 2, 3\}$
 013 $\{2, 3, 6\}$ 014 $\{1, 2, 3\}$
 015 -1 016 1
 017 0 018 -5
 019 -11 020 -11
 021 서로 같은 함수이다. 022 서로 같은 함수가 아니다.
 023 서로 같은 함수가 아니다. 024 서로 같은 함수가 아니다.
 025 서로 같은 함수가 아니다. 026 서로 같은 함수이다.
 027 $a=1, b=0$ 028 $a=-1, b=0$
 029 $a=-\frac{3}{2}, b=\frac{5}{2}$ 030 $a=1, b=-6$
 031 $a=-11, b=-8$ 032 ○
 033 × 034 ○
 035 × 036 \neg, \cup
 037 \neg, \cup, \cap 038 \cap
 039 \neg 040 \neg, \cup, \cap
 041 \neg, \cup, \cap 042 \neg
 043 \cap 044 \neg, \cup, \cap
 045 \neg, \cup 046 \cap
 047 \neg, \cup 048 \neg, \cup
 049 $a=1, b=3$ 050 $a=1, b=3$
 051 $a=2, b=-4$ 052 $a=-3, b=14$
 053 $a=-2, b=8$ 054 $a=-2, b=-3$
 055 2 056 3
 057 1 058 c
 059 a 060 $\frac{3}{2}$
 061 7 062 -26
 063 6 064 -1
 065 33 066 2
 067 13 068 26
 069 5 070 2
 071 2 072 $(g \circ f)(x) = 4x^2 - 3$
 073 $(f \circ g)(x) = -2x^2 + 6$ 074 $(f \circ g)(x) = -\frac{1}{2}x + 5$

- 075 $(g \circ f)(x) = -\frac{1}{2}x - 1$ 076 $(f \circ (g \circ h))(x) = 2x + 4$
 077 $((f \circ g) \circ h)(x) = 2x + 4$ 078 -2
 079 -3 080 $\frac{2}{3}$
 081 $\frac{4}{3}$ 082 $\frac{5}{9}$
 083 $h(x) = 3x + 8$ 084 $h(x) = \frac{1}{2}x + \frac{1}{2}$
 085 $h(x) = -x^2 + 3$ 086 $h(x) = -2x + 7$
 087 $h(x) = \frac{1}{4}x + 1$ 088 $h(x) = x^2 + 2x - 2$
 089 $f^n(x) = x - 2n$ 090 $f^n(x) = x + 3n$
 091 $f^n(x) = 2^n x$ 092 -1
 093 1 094 2
 095 ○ 096 ×
 097 × 098 ○
 099 2 100 4
 101 3 102 3
 103 $\frac{1}{2}$ 104 2
 105 4 106 2
 107 5 108 8
 109 5 110 6
 111 $a=-1, b=5$ 112 $a=-\frac{5}{2}, b=-\frac{1}{2}$
 113 $a=2, b=-6$ 114 $y=\frac{1}{2}x-\frac{1}{2}$
 115 $y=\frac{1}{4}x+2$ 116 $y=-\frac{1}{3}x+\frac{2}{3}$
 117 $y=3x-9$ 118 $y=-\frac{5}{2}x+10$
 119 1 120 -4
 121 2 122 19
 123 $-\frac{7}{3}$ 124 9
 125 1 126 -5
 127 -17 128 $\frac{7}{4}$
 129 $\frac{1}{4}$ 130 a
 131 b 132 b
 133 e 134 c
 135 c 136 b
 137 a
 138 10
 140 ②
 142 1
 144 ④
 139 5
 141 ①
 143 23
 145 ③

4 유리함수

II. 함수

50 ~ 58쪽

146 $\frac{2x+3}{x+1}$

148 $\frac{2x-1}{x(x-1)}$

150 $\frac{x+8}{(x+3)(x-3)}$

152 $\frac{2}{x}$

154 $\frac{x+4}{x(x-4)}$

156 $\frac{x-3}{(x+1)(x+5)}$

158 $\frac{2}{(x+1)(x-1)}$

160 $\frac{7}{(x-3)(x+4)}$

162 $\frac{6}{(x-4)(x+2)}$

164 $\frac{1}{x+1} - \frac{1}{x+2}$

166 $\frac{1}{2} \left(\frac{1}{x} - \frac{1}{x+2} \right)$

168 ○

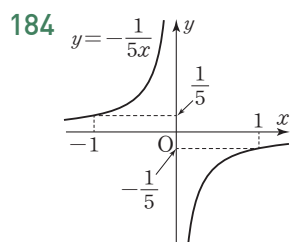
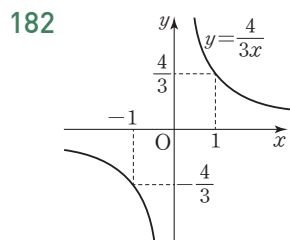
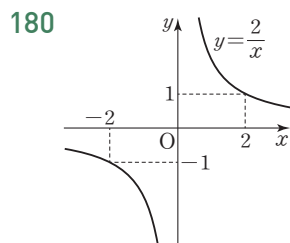
170 ×

172 ○

174 $\{x|x \neq 0 \text{인 실수}\}$

176 $\{x|x \text{는 모든 실수}\}$

178 $\{x|x \neq -1, x \neq 1 \text{인 실수}\}$



147 $\frac{x+1}{x+4}$

149 $\frac{x+7}{(x-2)(x+1)}$

151 $\frac{2x-7}{(x-1)(x-2)}$

153 $\frac{1}{x(x-3)}$

155 $\frac{x}{(x-1)(x+5)}$

157 $\frac{x+1}{(x-2)(x-4)}$

159 $\frac{18}{(x-4)(x+5)}$

161 $\frac{x+5}{(x+2)(x+3)}$

163 $\frac{1}{x-1} - \frac{1}{x}$

165 $\frac{1}{x-1} - \frac{1}{x+1}$

167 $\frac{1}{3} \left(\frac{1}{x+1} - \frac{1}{x+4} \right)$

169 ×

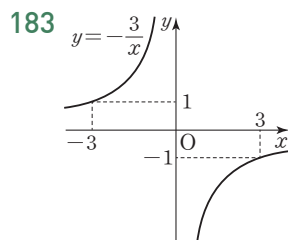
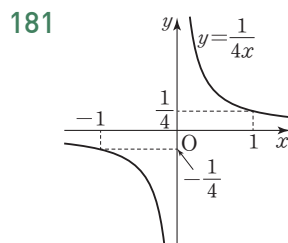
171 ×

173 ○

175 $\{x|x \neq \frac{1}{2} \text{인 실수}\}$

177 $\{x|x \neq -2 \text{인 실수}\}$

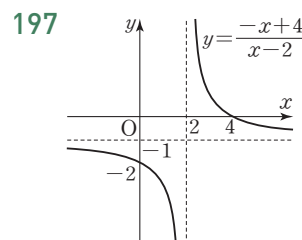
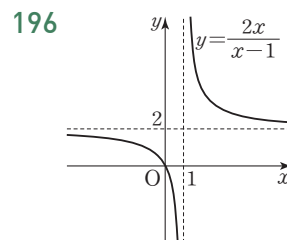
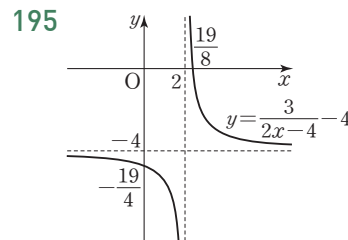
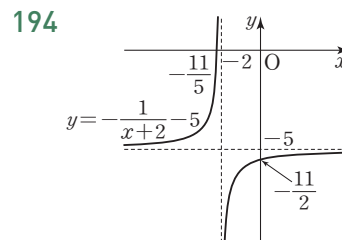
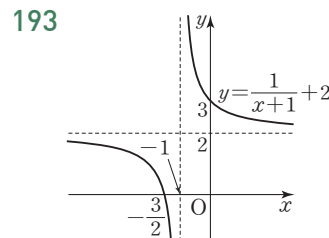
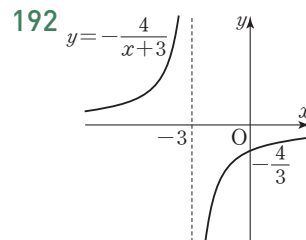
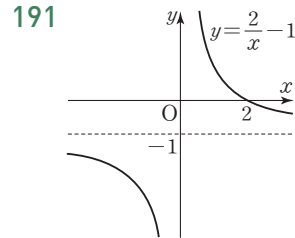
179 $\{x|x \text{는 모든 실수}\}$



185 $y = \frac{1}{x-2} + 1$

187 $y = \frac{4}{x+2} + 4$

189 $y = \frac{1}{3(x+4)} + 3$



186 $y = -\frac{1}{x-1} - 3$

188 $y = -\frac{5}{x-6} - 1$

190 $y = -\frac{3}{2(x+5)} - 2$

점근선의 방정식: $x=0, y=-1$

정의역: $\{x|x \neq 0 \text{인 실수}\}$

치역: $\{y|y \neq -1 \text{인 실수}\}$

점근선의 방정식: $x=-3, y=0$

정의역: $\{x|x \neq -3 \text{인 실수}\}$

치역: $\{y|y \neq 0 \text{인 실수}\}$

점근선의 방정식: $x=-1, y=2$

정의역: $\{x|x \neq -1 \text{인 실수}\}$

치역: $\{y|y \neq 2 \text{인 실수}\}$

점근선의 방정식:

$x=-2, y=-5$

정의역: $\{x|x \neq -2 \text{인 실수}\}$

치역: $\{y|y \neq -5 \text{인 실수}\}$

점근선의 방정식: $x=2, y=-4$

정의역: $\{x|x \neq 2 \text{인 실수}\}$

치역: $\{y|y \neq -4 \text{인 실수}\}$

점근선의 방정식: $x=1, y=2$

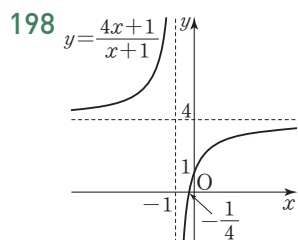
정의역: $\{x|x \neq 1 \text{인 실수}\}$

치역: $\{y|y \neq 2 \text{인 실수}\}$

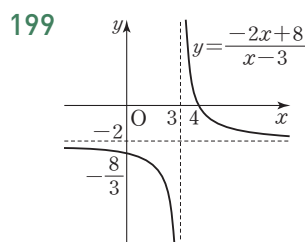
점근선의 방정식: $x=2, y=-1$

정의역: $\{x|x \neq 2 \text{인 실수}\}$

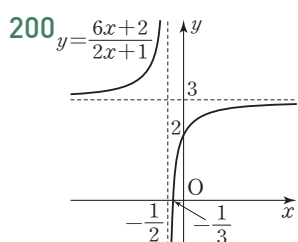
치역: $\{y|y \neq -1 \text{인 실수}\}$



점근선의 방정식: $x = -1, y = 4$
 정의역: $\{x | x \neq -1 \text{인 실수}\}$
 치역: $\{y | y \neq 4 \text{인 실수}\}$



점근선의 방정식: $x = 3, y = -2$
 정의역: $\{x | x \neq 3 \text{인 실수}\}$
 치역: $\{y | y \neq -2 \text{인 실수}\}$



점근선의 방정식: $x = -\frac{1}{2}, y = 3$
 정의역: $\{x | x \neq -\frac{1}{2} \text{인 실수}\}$
 치역: $\{y | y \neq 3 \text{인 실수}\}$

201 ○

203 ○

205 ×

207 5

209 -2

211 $-\frac{8}{3}$

213 $a = -1, b = 0, c = 2$

215 $a = 3, b = 9, c = 1$

217 최댓값: 2, 최솟값: $\frac{4}{3}$

219 최댓값: $-\frac{4}{3}$, 최솟값: $-\frac{5}{3}$

221 $y = \frac{x}{1-x}$

223 $y = \frac{2x+5}{x+3}$

225 $y = \frac{4x+7}{3x-1}$

227 -2

229 -4

230 4

232 ①

234 ④

236 1

202 ×

204 ○

206 ○

208 1

210 $-\frac{5}{2}$

212 $a = 2, b = -4, c = -1$

214 $a = -4, b = 8, c = -3$

216 최댓값: 0, 최솟값: -2

218 최댓값: $\frac{14}{5}$, 최솟값: 2

220 최댓값: $\frac{7}{4}$, 최솟값: $-\frac{9}{8}$

222 $y = \frac{3x-1}{x+2}$

224 $y = \frac{5x+1}{2-2x}$

226 -1

228 -3

231 ⑤

233 ①

235 6

237 ⑤

5 무리함수

II. 함수

59 ~ 66쪽

238 $x \geq -1$

240 $x > 2$

242 $-2 \leq x \leq 3$

244 $\sqrt{x} - 2$

246 $\sqrt{x+1} + 1$

248 $\frac{\sqrt{1+x} + \sqrt{1-x}}{2}$

250 $-\frac{4}{x}$

252 $-\sqrt{2}$

254 $6 + 4\sqrt{2}$

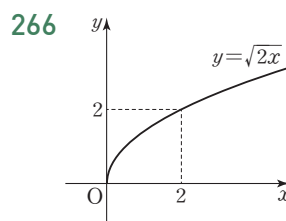
256 ×

258 ○

260 ○

262 $\{x | x \geq -\frac{3}{2}\}$

264 $\{x | x \leq 5\}$



239 $x \geq \frac{5}{2}$

241 $x < 4$

243 $3 \leq x < 5$

245 $\sqrt{x} + 3$

247 $\sqrt{x+3} + \sqrt{x+1}$

249 $2\sqrt{x}$

251 $2x$

253 $-\sqrt{3}$

255 ○

257 ×

259 ×

261 $\{x | x \geq 2\}$

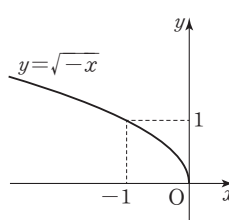
263 $\{x | x \leq 2\}$

265 $\{x | -2 \leq x \leq 2\}$

정의역: $\{x | x \geq 0\}$

치역: $\{y | y \geq 0\}$

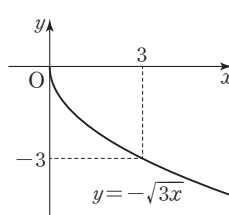
267



정의역: $\{x | x \leq 0\}$

치역: $\{y | y \geq 0\}$

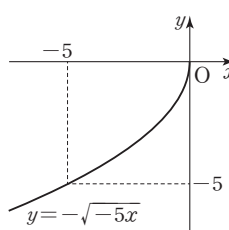
268



정의역: $\{x | x \geq 0\}$

치역: $\{y | y \leq 0\}$

269

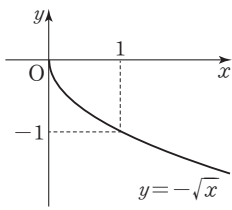


정의역: $\{x | x \leq 0\}$

치역: $\{y | y \leq 0\}$

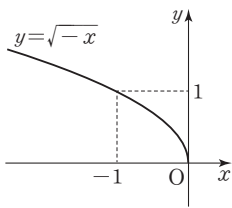
빠른정답

270



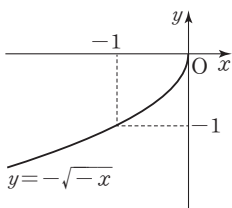
$$y = -\sqrt{x}$$

271



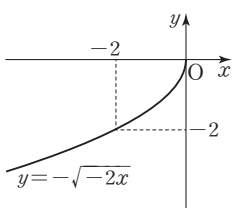
$$y = \sqrt{-x}$$

272



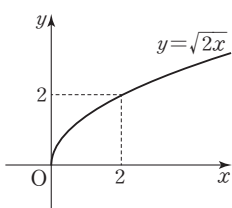
$$y = -\sqrt{-x}$$

273



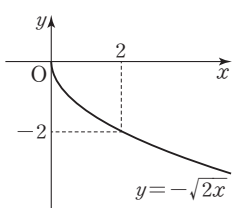
$$y = -\sqrt{-2x}$$

274



$$y = \sqrt{2x}$$

275



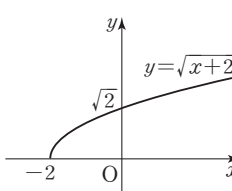
$$y = -\sqrt{2x}$$

276 $y = \sqrt{3x-3} + 2$

278 $y = -\sqrt{-2x-6} + 5$

280 $y = -\sqrt{2x} + 7$

282



277 $y = -\sqrt{5x-10} - 4$

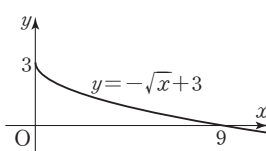
279 $y = \sqrt{-x-3} + 2$

281 $y = -\sqrt{-3x+9} - 1$

정의역: $\{x | x \geq -2\}$

치역: $\{y | y \geq 0\}$

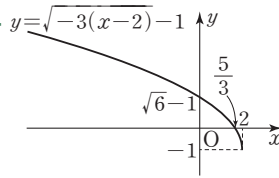
283



정의역: $\{x | x \geq 0\}$

치역: $\{y | y \leq 3\}$

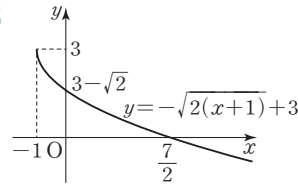
284



정의역: $\{x | x \leq 2\}$

치역: $\{y | y \geq -1\}$

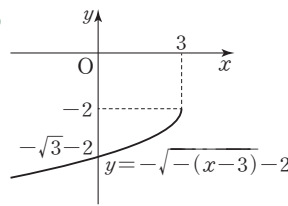
285



정의역: $\{x | x \geq -1\}$

치역: $\{y | y \leq 3\}$

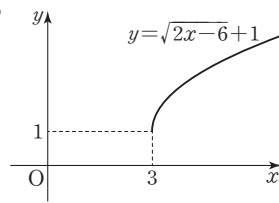
286



정의역: $\{x | x \leq 3\}$

치역: $\{y | y \leq -2\}$

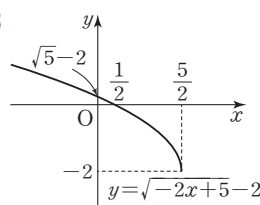
287



정의역: $\{x | x \geq 3\}$

치역: $\{y | y \geq 1\}$

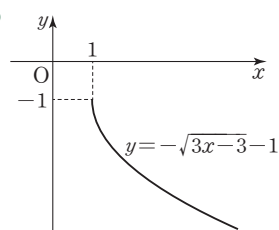
288



정의역: $\{x | x \leq \frac{5}{2}\}$

치역: $\{y | y \geq -2\}$

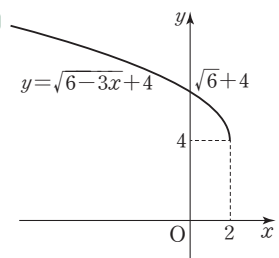
289



정의역: $\{x | x \geq 1\}$

치역: $\{y | y \leq -1\}$

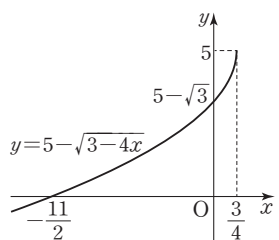
290



정의역: $\{x | x \leq 2\}$

치역: $\{y | y \geq 4\}$

291



정의역: $\{x | x \leq \frac{3}{4}\}$

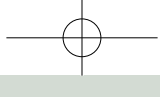
치역: $\{y | y \leq 5\}$

292 $a=2, b=4, c=1$

294 $a=3, b=9, c=4$

293 $a=-1, b=1, c=-1$

295 $a=-4, b=16, c=2$



296 최댓값: 2, 최솟값: -2

298 최댓값: 3, 최솟값: 2

300 최댓값: 4, 최솟값: 2

302 $k < 2$ 또는 $k = \frac{9}{4}$

304 $k \geq -\frac{5}{2}$

306 $y = -\frac{1}{4}(x-1)^2 + \frac{3}{4} \ (x \geq 1)$

307 $y = \frac{1}{2}(x-2)^2 - 3 \ (x \leq 2)$

308 $y = -\frac{1}{3}(x+5)^2 - \frac{2}{3} \ (x \leq -5)$

309 $y = -\frac{1}{3}(x+4)^2 + 2 \ (x \geq -4)$

310 ②

312 -21

314 11

316 ④

297 최댓값: 7, 최솟값: 5

299 최댓값: -2, 최솟값: -5

301 $1 \leq k < \frac{5}{4}$

303 $k < -\frac{13}{4}$

305 $y = x^2 + 3 \ (x \geq 0)$

311 ②

313 ③

315 ③

317 $2\sqrt{2}$

043 840

045 14400

047 5

049 4

051 2

053 24

055 60

057 12

059 20

061 60

063 96

065 30

067 $cdba$

069 35412

071 48

073 72

075 72

077 480

079 1152

081 24

083 432

085 6

087 1

089 56

091 $n=12$

093 $n=8$

095 21

097 120

099 10

101 40

103 525

105 15

107 20

109 210

111 456

113 1440

115 240

117 20

119 18

121 72

123 60

124 ②

126 ④

128 ②

130 ⑤

044 336

046 7

048 6

050 0

052 56

054 72

056 120

058 4

060 120

062 48

064 36

066 10번째

068 30

070 240

072 144

074 96

076 1440

078 72

080 72

082 108

084 576

086 1

088 7

090 $n=6$

092 $r=6$

094 $n=724$

096 84

098 15

100 18

102 150

104 1960

106 5

108 56

110 52

112 310

114 64800

116 15

118 14

120 31

122 30

125 15

127 1728

129 60

131 54

III. 경우의 수

6

경우의 수

68 ~ 80쪽

001 11

003 23

005 5

007 12

009 9

011 7

013 10

015 8

017 210

019 12

021 6

023 10

025 6

027 12

029 12

031 24

033 48

035 72

037 360

039 1

041 720

002 12

004 7

006 12

008 2

010 6

012 7

014 12

016 32

018 24

020 6

022 8

024 31

026 9

028 15

030 16

032 108

034 48

036 24

038 120

040 1

042 144

빠른정답

9종 교과서 필수 문제

1 집합

82 ~ 83쪽

- | | | | |
|------|------|------|------|
| 1 ③ | 2 ② | 3 5 | 4 ④ |
| 5 63 | 6 24 | 7 5 | 8 ⑤ |
| 9 ② | 10 ③ | 11 ① | 12 8 |

2 명제

84 ~ 85쪽

- | | | | |
|-----|-----------|------|------|
| 1 ② | 2 ③ | 3 ③ | 4 ④ |
| 5 ⑤ | 6 $a > 1$ | 7 5 | 8 ⑤ |
| 9 ④ | 10 -10 | 11 ③ | 12 ② |

3 함수

86 ~ 87쪽

- | | | | |
|-------|------|------|------|
| 1 ① | 2 12 | 3 ③ | 4 2 |
| 5 ② | 6 ① | 7 ④ | 8 4 |
| 9 501 | 10 ② | 11 6 | 12 ⑤ |

4 유리함수

88 ~ 89쪽

- | | | | |
|--------|------|-----------------|------|
| 1 -8 | 2 ③ | 3 $\frac{1}{3}$ | 4 ⑤ |
| 5 3 | 6 15 | 7 4 | 8 ② |
| 9 ④ | 10 4 | 11 ③ | 12 ② |

5 무리함수

90 ~ 91쪽

- | | | | |
|--------|---------|-----------|-----------------------|
| 1 ④ | 2 ① | 3 5 | 4 ④ |
| 5 -1 | 6 제2사분면 | 7 ⑤ | 8 $(-\frac{8}{3}, 0)$ |
| 9 ⑤ | 10 ③ | 11 (3, 3) | 12 ④ |

6 경우의 수

92 ~ 93쪽

- | | | | |
|-----|---------|------|-------|
| 1 6 | 2 4 | 3 ④ | 4 ③ |
| 5 ① | 6 dbaec | 7 ③ | 8 120 |
| 9 ④ | 10 ② | 11 7 | 12 45 |

10 정답과 풀이