

令和2年度 工学部A方式(2/3) 数学解答

| 問題番号 | 小問 | 解答記号 | 正解 |
|------|------------------------|--|---|
| 1 | (1) | $\frac{\boxed{1}}{\boxed{2}\boxed{3}}$ | $\frac{9}{16}$ |
| | (2) | $a = \boxed{4}, b = -\boxed{5}, c = \boxed{6}$ | $a = 2, b = -4, c = 5$ |
| | (3) | $\boxed{7}\sqrt{\boxed{8}}$ | $9\sqrt{2}$ |
| | (4) | $x = \frac{\boxed{9}}{\boxed{10}}\pi$ で最小値 $-\boxed{11}$ | $x = \frac{5}{6}\pi$ で最小値 -1 |
| | (5) | $-\boxed{12}$ | -2 |
| 2 | (1) | $k = \boxed{13} \pm \boxed{14}\sqrt{\boxed{15}}$ | $k = 2 \pm 2\sqrt{3}$ |
| | (2) | $k = -\boxed{16}$ または $k = \boxed{17}$ | $k = -2$ または $k = 6$ |
| | (3) | $k < -\boxed{18}$ | $k < -2$ |
| 3 | (1) | $\boxed{19}\boxed{20}\boxed{21}$ | 504 |
| | (2) | $\boxed{22}\boxed{23}\boxed{24}\boxed{25}$ | 1680 |
| | (3) | $\boxed{26}\boxed{27}\boxed{28}$ | 280 |
| 4 | (1) | $\frac{\boxed{29}}{\boxed{30}}\vec{OA} + \frac{\boxed{31}}{\boxed{32}}\vec{OC}$ | $\frac{2}{3}\vec{OA} + \frac{2}{3}\vec{OC}$ |
| | (2) | $ \vec{OP} = \frac{\boxed{33}}{\boxed{34}}\sqrt{\boxed{35}}, \vec{AP} = \frac{\sqrt{\boxed{36}}}{\boxed{37}}$ | $ \vec{OP} = \frac{2}{3}\sqrt{2}, \vec{AP} = \frac{\sqrt{5}}{3}$ |
| | (3) | $\frac{\boxed{38}}{\boxed{39}}$ | $\frac{2}{9}$ |
| 5 | (1) | $\boxed{40}\boxed{41}$ | 53 |
| | (2) | $\boxed{42}\boxed{43}$ | -3 |
| | (3) | $\frac{\boxed{44} + \boxed{45}\boxed{46} \cdot (-3)^{\boxed{47}\boxed{48}}}{4}$ | $\frac{5 + 23 \cdot (-3)^{19}}{4}$ |
| 6 | (1) | $(\boxed{49}, \boxed{50})$ | (2, 4) |
| | | $(-1, -\boxed{51})$ | (-1, -2) |
| | (2) | $(-\boxed{52}, \boxed{53}\boxed{54})$ | (-4, 28) |
| | | $-\boxed{55}\boxed{56}$ | -10 |
| (3) | $\boxed{57}\boxed{58}$ | 18 | |