

令和7年度 一般選抜A個別方式（第2日）数学解答

| 問題番号 | 小問  | 解答記号                                                                                                                                                     | 正解                                                                        |
|------|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| 1    | (1) | $\boxed{1}$                                                                                                                                              | 2                                                                         |
|      | (2) | $k = \boxed{2}$ , 最小値は $\boxed{3}$                                                                                                                       | $k = 2$ , 最小値は 4                                                          |
|      | (3) | $\log_2 \boxed{4}$                                                                                                                                       | $\log_2 5$                                                                |
|      | (4) | $\boxed{5}x + \boxed{6} + \frac{\boxed{7}x + \boxed{8}}{x^2 - 2}$                                                                                        | $2x + 3 + \frac{4x + 7}{x^2 - 2}$                                         |
|      | (5) | $\boxed{9} \boxed{10}$                                                                                                                                   | 34                                                                        |
| 2    | (1) | $\boxed{11} - \boxed{12}t^2$                                                                                                                             | $1 - 2t^2$                                                                |
|      | (2) | $\boxed{13}t + \frac{\boxed{14}}{t}$                                                                                                                     | $2t + \frac{1}{t}$                                                        |
|      | (3) | $\boxed{15}\sqrt{\boxed{16}}$                                                                                                                            | $2\sqrt{2}$                                                               |
| 3    | (1) | $(x - \boxed{17})^2 + (y - \boxed{18})^2 = \boxed{19}$                                                                                                   | $(x - 1)^2 + (y - 1)^2 = 1$                                               |
|      | (2) | $\boxed{20} + \frac{1}{\sqrt{\boxed{21}}}$                                                                                                               | $1 + \frac{1}{\sqrt{5}}$                                                  |
|      | (3) | $\text{BP}^2 = \boxed{22} + \frac{2}{\sqrt{\boxed{23}}}, \cos 2\theta = \frac{1}{\sqrt{\boxed{24}}}$                                                     | $\text{BP}^2 = 2 + \frac{2}{\sqrt{5}}, \cos 2\theta = \frac{1}{\sqrt{5}}$ |
| 4    | (1) | $\boxed{25}$                                                                                                                                             | 2                                                                         |
|      | (2) | $\boxed{26}$                                                                                                                                             | 2                                                                         |
|      | (3) | $a = \boxed{27}, b = \boxed{28} \boxed{29} \boxed{30}, c = \boxed{31} \boxed{32}$                                                                        | $a = 3, b = -12, c = 15$                                                  |
| 5    | (1) | $\frac{k\overrightarrow{\text{AB}} + \overrightarrow{\text{AC}}}{k + \boxed{33}}$                                                                        | $\frac{k\overrightarrow{\text{AB}} + \overrightarrow{\text{AC}}}{k + 5}$  |
|      | (2) | $\boxed{34}$                                                                                                                                             | 5                                                                         |
|      | (3) | $\boxed{35}, \frac{\boxed{36}}{\boxed{37}}\overrightarrow{\text{AD}}, \boxed{38} : \boxed{39}, \frac{\boxed{40}\sqrt{\boxed{41}\boxed{42}}}{\boxed{43}}$ | $4, \frac{5}{9}\overrightarrow{\text{AD}}, 5 : 4, \frac{2\sqrt{47}}{9}$   |
| 6    | (1) | $\boxed{44}, \boxed{45}$                                                                                                                                 | 6, 5                                                                      |
|      | (2) | $\boxed{46} \boxed{47}$                                                                                                                                  | -1                                                                        |
|      | (3) | $\boxed{48} \boxed{49}, \boxed{50} \boxed{51}$                                                                                                           | 82, 82                                                                    |