

|      |  |    |  |
|------|--|----|--|
| 在籍番号 |  | 氏名 |  |
|------|--|----|--|

[1] 次の行列式を計算せよ.

$$(1) \begin{vmatrix} a & b \\ c & d \end{vmatrix} = \boxed{\phantom{000}}.$$

$$(2) \begin{vmatrix} 1 & 0 & 0 \\ 2 & 4 & 0 \\ 3 & 5 & 6 \end{vmatrix} = \boxed{\phantom{000}}.$$

$$(3) \begin{vmatrix} 1 & 2 & 3 \\ 0 & 4 & 5 \\ 0 & 0 & 6 \end{vmatrix} = \boxed{\phantom{000}}.$$

$$(4) \begin{vmatrix} 1 & 1 & 1 \\ 3 & 3 & 3 \\ 5 & 5 & 5 \end{vmatrix} = \boxed{\phantom{000}}.$$

$$(5) \begin{vmatrix} 0 & 0 & 1 \\ 0 & 1 & 0 \\ 1 & 0 & 0 \end{vmatrix} = \boxed{\phantom{000}}.$$

$$(6) \begin{vmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 0 & 0 & 0 \end{vmatrix} = \boxed{\phantom{000}}.$$

$$(7) \begin{vmatrix} 1 & 0 & 0 \\ 0 & \cos \theta & -\sin \theta \\ 0 & \sin \theta & \cos \theta \end{vmatrix} = \boxed{\phantom{000}}.$$

$$(8) \begin{vmatrix} \cos \theta & 0 & \sin \theta \\ 0 & 1 & 0 \\ -\sin \theta & 0 & \cos \theta \end{vmatrix} = \boxed{\phantom{000}}.$$

$$(9) \begin{vmatrix} 3 & 3 & 3 & 3 \\ 3 & 3 & 3 & 3 \\ 3 & 3 & 3 & 3 \\ 3 & 3 & 3 & 3 \end{vmatrix} = \boxed{\phantom{000}}.$$

$$(10) \begin{vmatrix} 2 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 0 & 2 & 2 \\ 0 & 0 & 0 & 2 \end{vmatrix} = \boxed{\phantom{000}}.$$