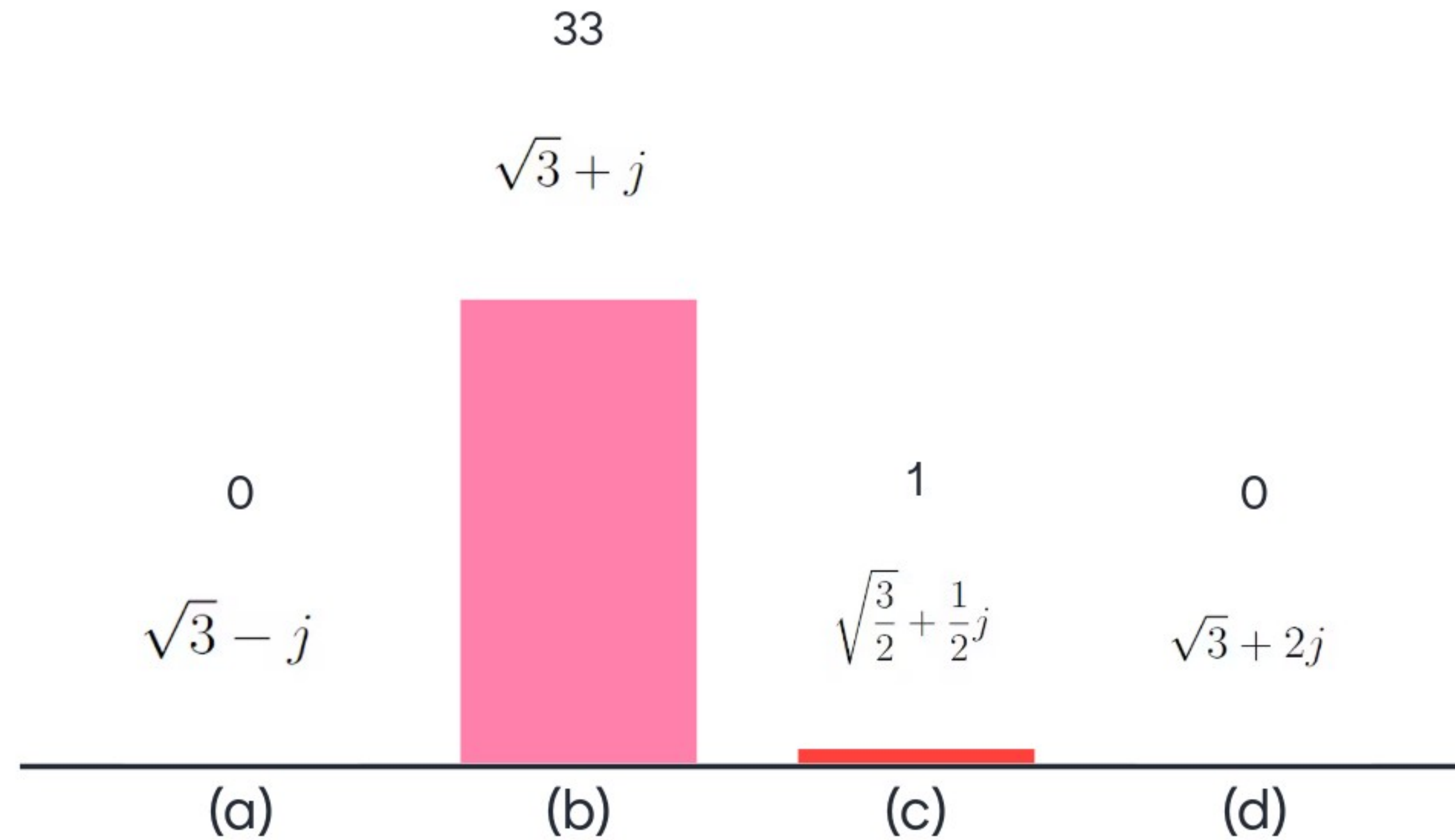
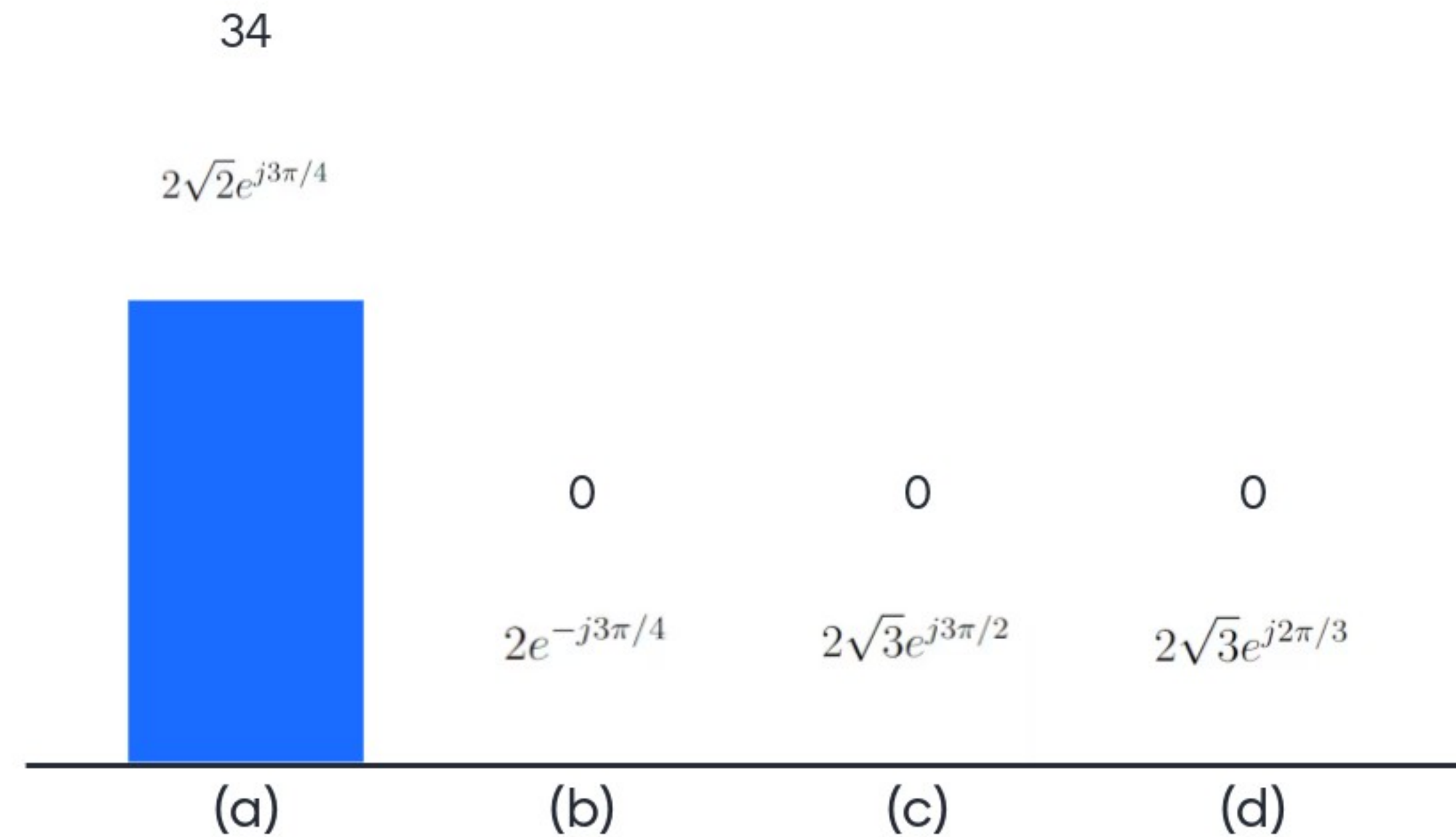


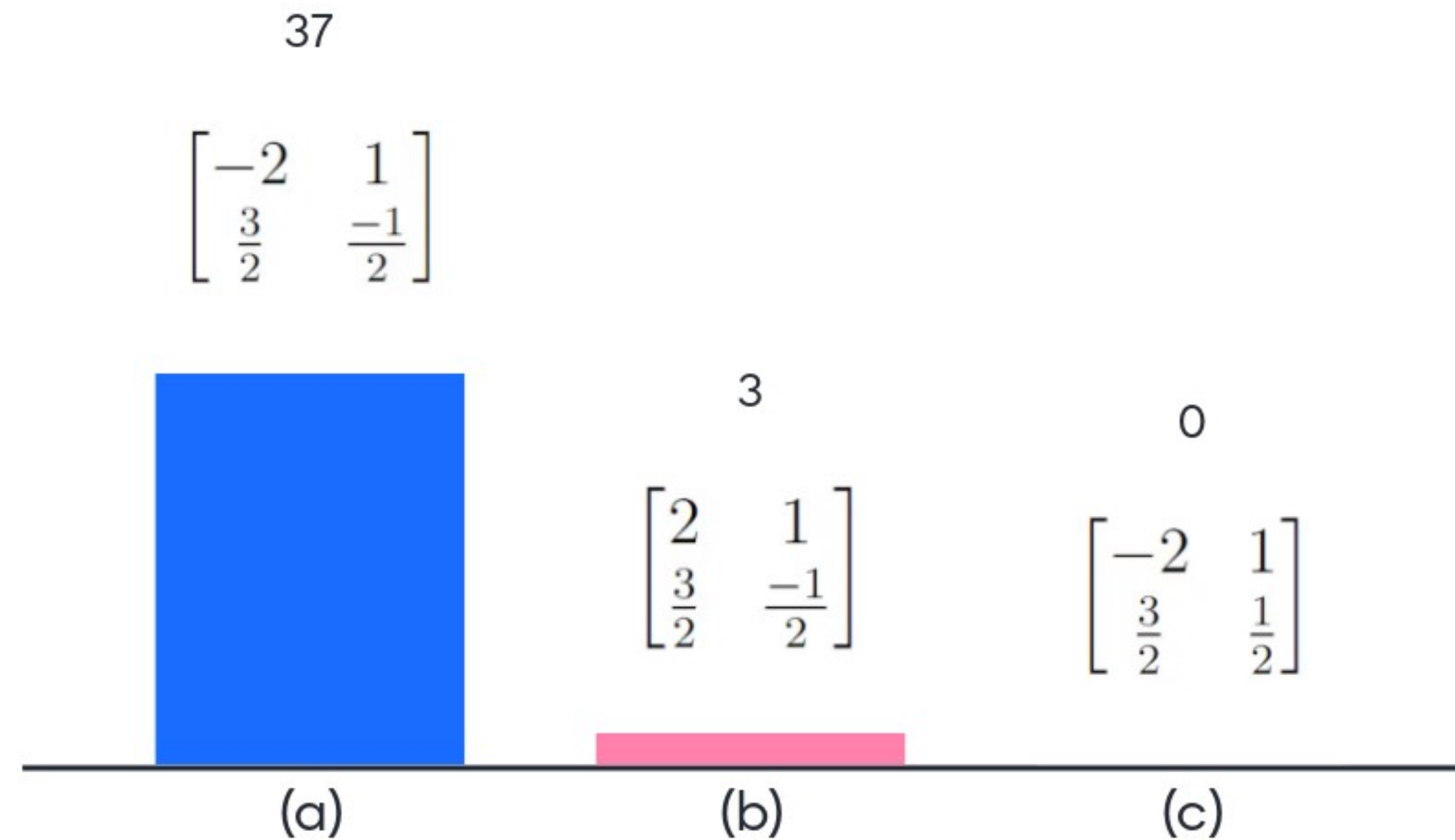
1. Write $2e^{j\pi/6}$ in the form $a + jb$.



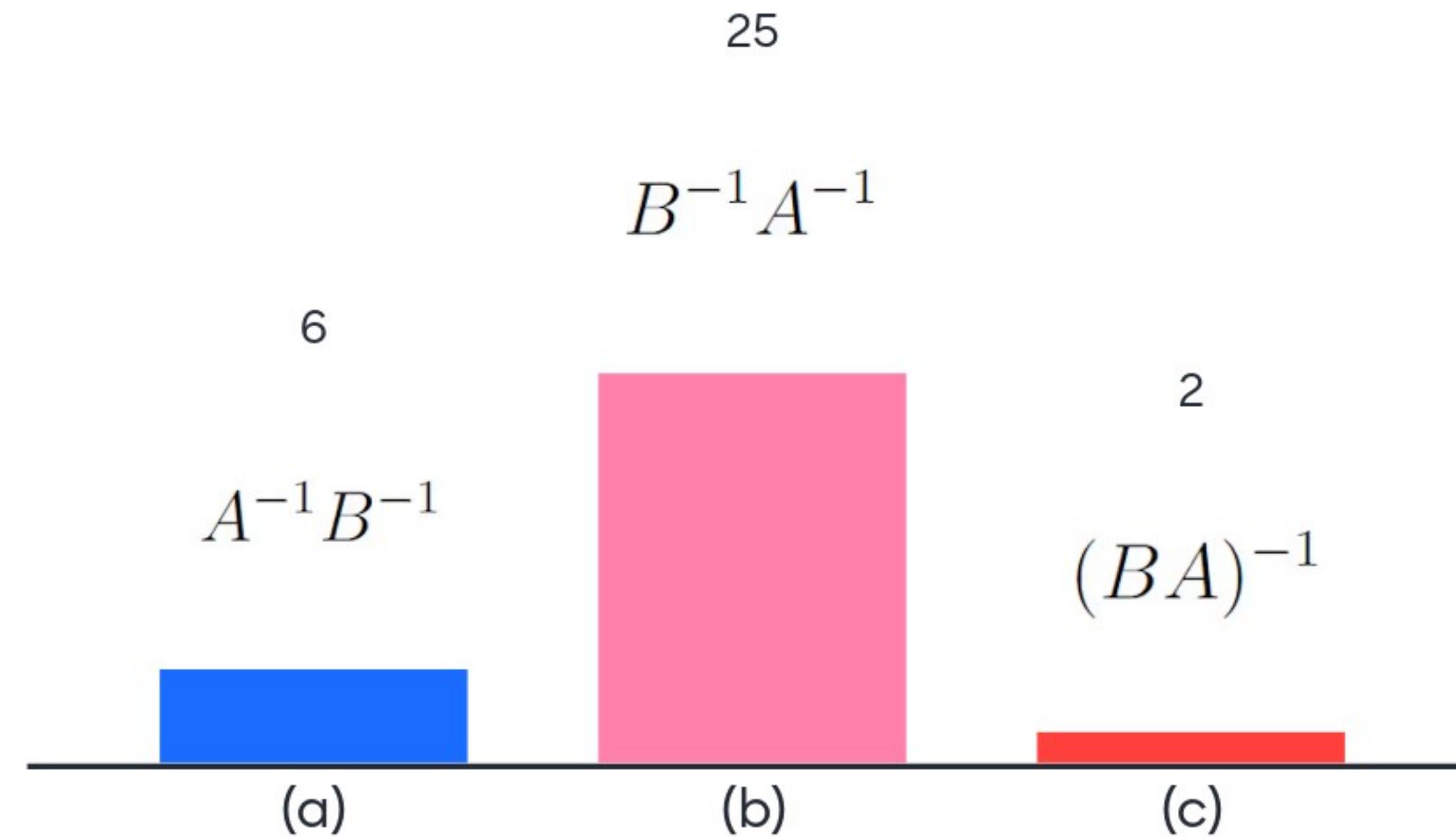
2. Write $(2 + j2)e^{j\pi/2}$ in the form $re^{j\theta}$, where $r \geq 0$ and $0 \leq \theta < 2\pi$.



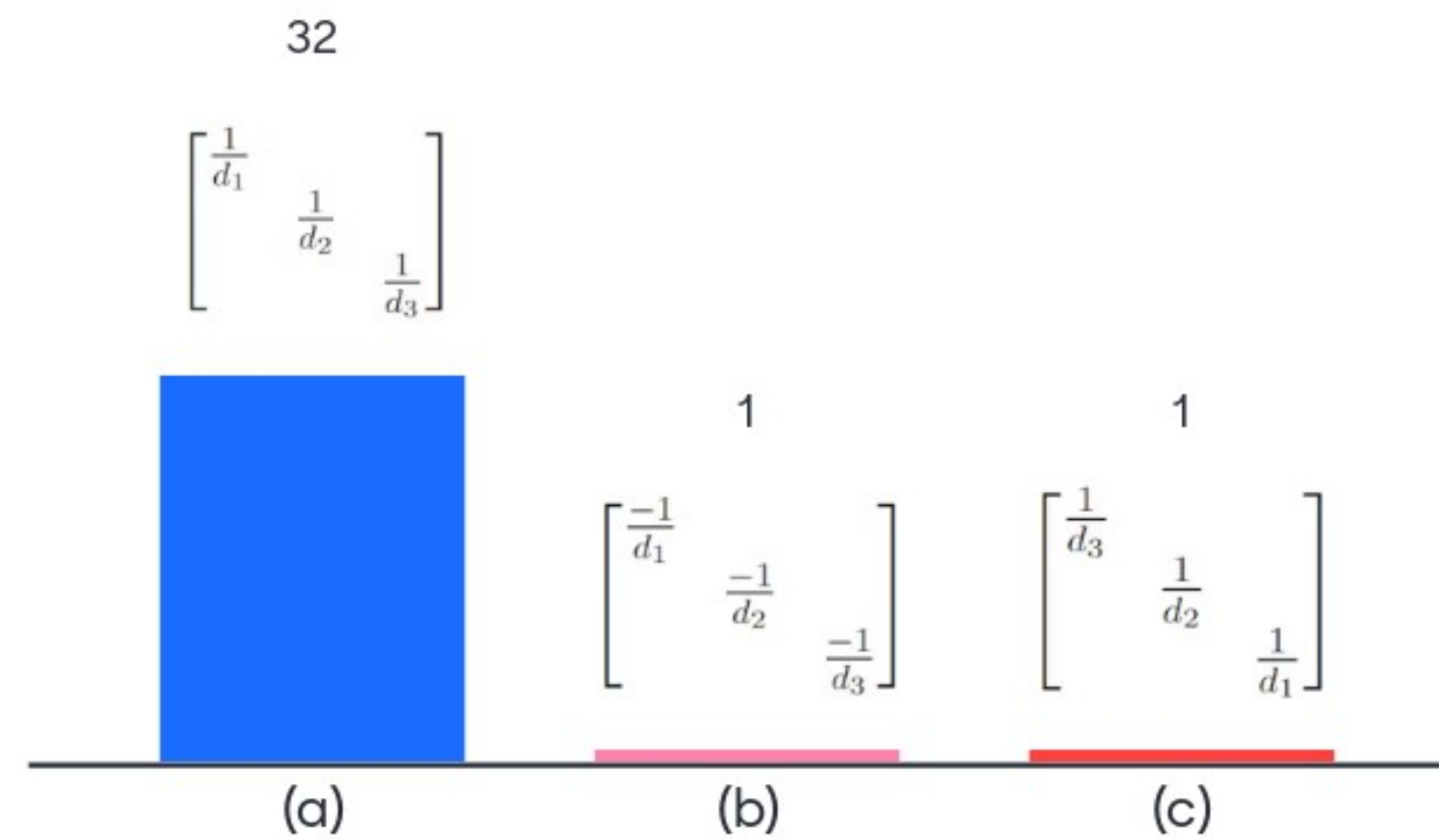
3. What is the inverse of $\begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}$?



4. What is an alternative expression for $(AB)^{-1}$, where A, B are matrices?



5. What is the inverse of $\begin{bmatrix} d_1 & & \\ & d_2 & \\ & & d_3 \end{bmatrix}$?



6. What are the eigenvalues of $\begin{bmatrix} 2 & -4 \\ -1 & -1 \end{bmatrix}$?

