What is the coefficient matrix of the following system of equations?

$5a + 3b = 7$
$3a + 2b = 5$

- ○ $\begin{bmatrix} 5 \\ 7 \end{bmatrix}$

- ○ $\begin{bmatrix} 5 & -3 \\ 3 & -2 \end{bmatrix}$

- ○ $\begin{bmatrix} 7 \\ 5 \end{bmatrix}$

- ○ $\begin{bmatrix} 5 & 3 \\ 3 & 2 \end{bmatrix}$

2. What is the matrix equation for the following system of equations?

$5a + 3b = 7$
$3a + 2b = 5$

- ○ $\begin{bmatrix} 5 & 3 \\ 3 & 2 \end{bmatrix}\begin{bmatrix} a \\ b \end{bmatrix} = \begin{bmatrix} 7 \\ 5 \end{bmatrix}$

- ○ $\begin{bmatrix} 5 & -3 \\ 3 & -2 \end{bmatrix}\begin{bmatrix} a \\ b \end{bmatrix} = \begin{bmatrix} 5 \\ 7 \end{bmatrix}$

- ○ $\begin{bmatrix} 5 & -3 \\ 3 & -2 \end{bmatrix}\begin{bmatrix} a \\ b \end{bmatrix} = \begin{bmatrix} 7 \\ 5 \end{bmatrix}$

- ○ $\begin{bmatrix} 5 & 3 \\ 3 & 2 \end{bmatrix}\begin{bmatrix} a \\ b \end{bmatrix} = \begin{bmatrix} 5 \\ 7 \end{bmatrix}$