

## 2.37(b)

### 1 2.37(b), §1 Asked

Given:

$$A = \begin{pmatrix} 1 & 2 \\ 3 & -4 \end{pmatrix} \quad B = \begin{pmatrix} 5 & 0 \\ -6 & 7 \end{pmatrix}$$

Asked:

$$2A + 3B$$

(3, not 32).

### 2 2.37(b), §2 Solution

$$2 \begin{pmatrix} 1 & 2 \\ 3 & -4 \end{pmatrix} + 3 \begin{pmatrix} 5 & 0 \\ -6 & 7 \end{pmatrix} = \begin{pmatrix} 2 & 4 \\ 6 & -8 \end{pmatrix} + \begin{pmatrix} 15 & 0 \\ -18 & 21 \end{pmatrix} = \begin{pmatrix} 17 & 4 \\ -12 & 13 \end{pmatrix}$$