Math 2250, Fall 2015, Quiz 4   **October 7, 2015**   **R. Bruner**

Let

$$A = \begin{bmatrix} 2 & 0 & -1 \\ 0 & 3 & 1 \end{bmatrix} \qquad \text{and} \qquad B = \begin{bmatrix} 5 & 7 \\ 1 & 3 \\ 6 & 1 \end{bmatrix}$$

1. A gives a linear transformation $\mathbf{R}^3 \longrightarrow \mathbf{R}^2$. What linear transformations do B, AB and BA give?

2. Compute AB and BA.