# Math 4133 - Linear Algebra

**Quiz** #18 **- 2013.03.13**

Name: _____

---

Let $\mathbf{S}_2$ be the standard basis for $\mathbb{R}^2$, and let $\mathbf{B} = \{\langle 1, -1\rangle, \langle 1, 1\rangle\}$.

1. Write the vector $\langle 2, 3\rangle_{\mathbf{B}}$ in terms of the standard basis $\mathbf{S}_2$

2. Write the vector $\langle 2, 3\rangle$ in terms of the basis $\mathbf{B}$