

## Výsledky domácích úkolů ke cvičení č. 6

1. a)  $[\mathbf{u}_1, \mathbf{u}_2, \mathbf{u}_3, \mathbf{u}_4, \mathbf{u}_5] = [\mathbf{u}_1, \mathbf{u}_2, \mathbf{u}_4];$   
 $\mathbf{u}_3 = \mathbf{u}_1 + \mathbf{u}_2, \mathbf{u}_5 = 3\mathbf{u}_1 - 2\mathbf{u}_2 + 2\mathbf{u}_4,$

b)  $[\mathbf{u}_1, \mathbf{u}_2, \mathbf{u}_3, \mathbf{u}_4, \mathbf{u}_5] = [\mathbf{u}_1, \mathbf{u}_2, \mathbf{u}_3, \mathbf{u}_5];$   
 $\mathbf{u}_4 = \frac{3}{5}\mathbf{u}_1 + \frac{7}{5}\mathbf{u}_2 - \frac{2}{5}\mathbf{u}_3.$

2. a)  $\mathbb{R}^5 = [\mathbf{u}_1, \mathbf{u}_2, \mathbf{u}_3, \mathbf{v}_2, \mathbf{v}_4],$

b)  $\mathbb{R}^5 = [\mathbf{u}_1, \mathbf{u}_2, \mathbf{u}_3, \mathbf{v}_1, \mathbf{v}_3].$

3. a)  $[\mathbf{w}_1, \mathbf{w}_2, \mathbf{w}_3, \mathbf{w}_4] = [\mathbf{u}_1, \mathbf{u}_2, \mathbf{w}_2],$

b)  $[\mathbf{w}_1, \mathbf{w}_2, \mathbf{w}_3, \mathbf{w}_4] = [\mathbf{u}_1, \mathbf{u}_2, \mathbf{w}_3, \mathbf{w}_4].$