

## Projection Problems

Find  $\text{proj}_{\vec{U}}(\vec{V})$  for each pair of vectors below:

1.  $\vec{U} = 2\vec{i} + 3\vec{j}$  and  $\vec{V} = -20\vec{i} + 22\vec{j}$

2.  $\vec{U} = -4\vec{i} + 5\vec{j}$  and  $\vec{V} = 62\vec{i} + 25\vec{j}$

3.  $\vec{U} = -4\vec{i} + 2\vec{j} - 2\vec{k}$  and  $\vec{V} = 47\vec{i} - 13\vec{j} + 7\vec{k}$