

## PARAMETRIC EQUATIONS OF PLANES

For each problem below find parametric equations for the plane containing the point  $P = (1, 2, 3)$  and the nonparallel vectors  $\vec{u}$  and  $\vec{v}$ .

1.  $\vec{u} = 2\hat{i} + 3\hat{j}$  and  $\vec{v} = 3\hat{i} - 2\hat{j}$
2.  $\vec{u} = 2\hat{i} + 3\hat{j}$  and  $\vec{v} = -6\hat{i} + 9\hat{j}$
3.  $\vec{u} = 2\hat{i} + 3\hat{j} + \hat{k}$  and  $\vec{v} = 3\hat{i} - 2\hat{j} + \hat{k}$
4.  $\vec{u} = \hat{i} + \hat{j} - 5\hat{k}$  and  $\vec{v} = 2\hat{i} + 2\hat{j} - 4\hat{k}$
5.  $\vec{u} = -\hat{i} - \hat{j} - 5\hat{k}$  and  $\vec{v} = 2\hat{i} + 2\hat{j} - 10\hat{k}$