Practice worksheet | Vectors in three dimensions

Cross product and determinant calculations

Name: _____ Date: _____

6 questions | 12 marks

1. Find (1,0,1) cross (0,2,1). [2 marks]

2. Find (0,2,1) cross (1,0,1). [2 marks]

3. Find $\mathbf{i} \times \mathbf{j}$ and $\mathbf{j} \times \mathbf{i}$. [2 marks]

4. Is (3,0,-1) perpendicular to (1,2,3) cross (2,-1,0)? [2 marks]

5. Find the determinant with rows (1,2,0), (0,1,3), (2,0,1). [2 marks]

6. Find the volume spanned by (2,0,0), (0,3,0), (0,0,4). [2 marks]