

MATH 261 Quiz 2

Name: _____

Student number: _____

Show all work. 5 points each.

1) Use vectors to determine if the triangle with vertices $P(1, -3, -2)$, $Q(2, 0, -4)$ and $R(6, -2, -5)$ is a right triangle.

2) Find $\mathbf{a} \times \mathbf{b}$ and show that it is orthogonal to both \mathbf{a} and \mathbf{b} . Where $\mathbf{a} = 3\mathbf{i} + 2\mathbf{j} + 4\mathbf{k}$ and $\mathbf{b} = \mathbf{i} - 2\mathbf{j} - 3\mathbf{k}$.