Perpendicularity

Name: _____ Date: _____

6 questions | 14 marks

1. Are $(2, 3)$ and $(6, -4)$ perpendicular? [2 marks]

2. Find k if $(k, 5)$ is perpendicular to $(2, -6)$. [2 marks]

3. Find a unit vector perpendicular to $(3, 4)$. [2 marks]

4. A=(0,0), B=(2,1), C=(1,3). Decide whether angle ABC is a right angle. [3 marks]

5. For u=(t,2), v=(3,t), find all real t making u perpendicular to v. [3 marks]

6. Explain why $\mathbf{0} \cdot (1, 2) = 0$ does not show a right angle. [2 marks]