# Geometric areas and perpendicular vectors

Name: _____ Date: _____

6 questions | 12 marks

**1.** Find the parallelogram area spanned by (1,0,0) and (0,2,2). [2 marks]

**2.** Find triangle area for A(1,0,0), B(3,0,0), C(1,4,0). [2 marks]

**3.** Give a length-5 vector perpendicular to (1,0,0) and (0,1,0). [2 marks]

**4.** Find triangle area for sides (1,2,0) and (0,1,3). [2 marks]

**5.** Explain why replacing b by 3b triples the spanned parallelogram area. [2 marks]

**6.** Find a unit normal to sides (2,0,0), (0,3,4) with positive z component. [2 marks]