Practice worksheet | Vectors in three dimensions

Three-dimensional coordinates, magnitude and unit vectors

Name: _____ Date: _____

6 questions | 12 marks

1. Find the magnitude of $(1, 2, 2)$. [2 marks]

2. Find a unit vector along $(0, -3, 4)$. [2 marks]

3. Find the distance from $(2, -1, 3)$ to $(5, 3, 15)$. [2 marks]

4. Find a length-6 vector opposite to $(1, 2, 2)$. [2 marks]

5. Find positive k when $|(k, 2, 2)| = 5$. [2 marks]

6. A drone moves 6 m east, 3 m north and 2 m up. Find its displacement length. [2 marks]