Magnitude and direction

Name: _____ Date: _____

6 questions | 15 marks

1. Find the magnitude of $(5, 12)$. [2 marks]

2. Find the exact magnitude and direction of $(-4, 4)$. [2 marks]

3. A displacement is $(8, -6)$ m. Find its magnitude and its direction south of east to 0.1°. [3 marks]

4. A non-zero vector has magnitude 10 and direction 60°. Find its exact components. [3 marks]

5. Find k if $(k, 4)$ has magnitude 5. [3 marks]

6. Explain why $(0, 0)$ cannot be assigned a unique direction angle. [2 marks]