Vector/Cartesian equations of lines

Name: _____ Date: _____

6 questions | 12 marks

1. Write a line through (2,-1,4) parallel to (1,3,-2). [2 marks]

2. Find the point at t=-2 on $(1, 0, 3) + t(2, -1, 1)$. [2 marks]

3. Is (3,2,4) on $(1, 0, 1) + t(1, 1, 2)$? [2 marks]

4. Convert $(1, 2, 3) + t(0, 4, -2)$ to Cartesian form. [2 marks]

5. Parametrise the segment from (0,1,2) to (4,-1,6). [2 marks]

6. Lines use points (1,2,3) and (3,1,7), and directions (2,-1,4) and (-4,2,-8). Are they the same line? [2 marks]