Practice worksheet | Vectors in three dimensions

Row operations and geometric interpretation of solution sets

Name: _____ Date: _____

6 questions | 12 marks

1. Apply $R_2 \leftarrow R_2 - 3R_1$ to [1,2,-1|4] and [3,7,-2|13]. [2 marks]

2. Interpret rows [1,0,0|2], [0,1,0|-1], [0,0,1|3]. [2 marks]

3. Interpret rows [1,2,0|5], [0,0,1|1], [0,0,0|0]. [2 marks]

4. Interpret a consistent three-variable system with one pivot. [2 marks]

5. Is multiplying a row by zero an equivalence operation? [2 marks]

6. Check (2,1,0) in x+y+z=3, 2x-y+z=3, x-y-z=1. [2 marks]