Translations as vectors

Name: _____ Date: _____

6 questions | 12 marks

1. Translate $(4, -2)$ by $(3, 5)$. [2 marks]

2. Find the displacement from $(-1, 6)$ to $(3, 2)$. [2 marks]

3. Translate by $(-4, 2)$, then by $(1, -5)$. State the single equivalent translation. [2 marks]

4. Explain why no 2 by 2 matrix alone sends every point two units right. [2 marks]

5. Find p if $3p + (2, -1) = (8, 5)$. [2 marks]

6. Under a translation, $P = (1, 4)$ becomes $(6, 2)$. Find the image of $Q = (-2, 0)$. [2 marks]