Practice worksheet | Vectors in two dimensions

Position and displacement vectors

Name: _____ Date: _____

6 questions | 15 marks

1. A=(3,1), B=(-2,7). Find $\overrightarrow{AB}$. [2 marks]

2. A particle starts at $(4, -3)$ and is displaced by $(-6, 5)$. Find its final position. [2 marks]

3. Find the midpoint of $(7, -4)$ and $(-1, 6)$. [2 marks]

4. A=(0,2), B=(12,8). Find P for AP:PB=1:2. [3 marks]

5. A=(2,1), B=(5,3). Find the point with $t = 2$ in $\mathbf{a} + t(\mathbf{b} - \mathbf{a})$ and explain its position. [3 marks]

6. An origin is shifted by vector **c**. Prove that the displacement between A and B stays unchanged. [3 marks]