Practice worksheet | Complex numbers

Vector interpretation of addition and conjugation

Name: _____ Date: _____

6 questions | 18 marks

1. Find $u+v$ and $u-v$ for $u=3-2i$ and $v=-1+i$. [3 marks]

2. Find the vector from $A=-2+i$ to $B=1-3i$. [2 marks]

3. Find the midpoint between $2+5i$ and $-4-i$. [3 marks]

4. Describe the effect of multiplying all complex numbers by -2. [3 marks]

5. Prove $z+\overline{z}$ is real and $z-\overline{z}$ has real part zero for every complex z. [4 marks]

6. A parallelogram has successive vertices 0, z, $z+w$, w. For $z=4+i$ and $w=-1+2i$, find its centre. [3 marks]