Practice worksheet | Complex Numbers

Modulus and argument

Name: _____ Date: _____

6 questions | 13 marks

1. Find the modulus and principal argument of $-\sqrt{3}-i$. [2 marks]

2. Give all arguments of -2. [2 marks]

3. If $z=3-4i$, calculate $z\bar{z}$ and $|z|$. [2 marks]

4. Find $|(1+2i)-(4-2i)|$. [2 marks]

5. Is $|z+w|=|z|+|w|$ always true? Use $z=1$, $w=-1$ to justify. [3 marks]

6. Find the principal argument of $2\text{cis}(-\frac{9\pi}{4})$. [2 marks]