Practice worksheet | Complex numbers

Modulus

Name: _____ Date: _____

6 questions | 16 marks

1. Find $|5 - 12i|$. [2 marks]

2. Find $|-3 + 2i|^2$. [2 marks]

3. Find the distance between $2 - i$ and $-1 + 3i$. [3 marks]

4. Given $|z| = 6$ and $|w| = 2$, find $|zw|$ and $\left|\frac{z}{w}\right|$. [3 marks]

5. Find all z such that $\text{Im}(z) = 5$ and $|z| = 13$. [3 marks]

6. Use $z = 1$ and $w = -1$ to show that $|z + w| = |z| + |w|$ is not always true. [3 marks]