Practice worksheet | Complex Numbers

Complex loci and geometry

Name: _____ Date: _____

6 questions | 14 marks

1. Give the centre and radius of $|z + 2 - i| = 4$. [2 marks]

2. Write $|z - (2 - i)| = 3$ as a Cartesian equation. [2 marks]

3. Find the locus $|z - i| = |z + i|$. [2 marks]

4. Describe $\text{Arg}(z-1)=\pi/2$. [3 marks]

5. Find the points satisfying $|z|=2$ and $\text{Re}\,z=1$. [3 marks]

6. A tracking system reports $|z-(3+2i)|\leq 1$. Interpret its possible positions. [2 marks]