

MEMORIAL UNIVERSITY OF NEWFOUNDLAND

DEPARTMENT OF MATHEMATICS AND STATISTICS

SECTION 1.11

Math 2000 Worksheet

WINTER 2020

For practice only. Not to be submitted.

- Given $z = 3 - 4i$ and $w = -1 + 7i$, evaluate each of the following.
 - $z + w$
 - $z - w$
 - $z \cdot w$
 - $\frac{w}{z}$
 - w^2
 - $|z|$
- Determine the complex number z with polar representation $(4, \frac{5\pi}{6})$.
- Find the polar representation of $z = \sqrt{3} + i$.
 - Use the polar representation to evaluate z^4 .