

⏪ Previous















Next ⏩

Problem 4.6

🔖 Bookmark this page

Problem 4.6

0.0/2.0 points (ungraded)
Let D be an entire complex plane with branch cuts along the rays $[-1, -1 + i\infty]$ and $[1, +\infty]$.
Given the function:

$$\varphi(z) = \sqrt[3]{1 + z^2}, \quad \varphi(0) = 1.$$

defined in the region D .
Find $\varphi(3i)$, if:

- 1) D is an entire complex plane with branch cuts along the rays $[-i, -i - \infty]$ и $[i, i + \infty]$;
- 2) D is an entire complex plane with branch cuts along the rays $[-i, -i + \infty]$ и $[i, -\infty]$;

Use i for complex unity, and e^{\wedge} for $e^{()}$.

1)
 $\varphi(3i) =$

2)
 $\varphi(3i) =$

Submit

You have used 0 of 6 attempts