

CHAPTER OVERVIEW

8: Branch Points and Branch Cuts

When introducing complex algebra, we postponed discussion of what it means to raise a complex number to a non-integer power, such as $z^{1/2}$, $z^{4/3}$, or z^π . It is now time to open that can of worms. This involves learning about the two indispensable concepts of **branch points** and **branch cuts**.

[8.1: Non-Integer Powers as Multi-Valued Operations](#)

[8.2: Branches](#)

[8.3: Aside- The Meaning of "Infinity" for Complex Numbers](#)

[8.4: Branch Cuts for General Multi-Valued Operations](#)

[8.5: Exercises](#)

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