

Derivadas con números complejos

$$1. \frac{d}{dz}(c) = 0$$

$$2. \frac{d}{dz} z^n = n z^{n-1}$$

$$3. \frac{d}{dz} e^z = e^z$$

$$4. \frac{d}{dz} a^z = a^z \ln a$$

$$5. \frac{d}{dz} \operatorname{sen} z = \cos z$$

$$6. \frac{d}{dz} \cos z = -\operatorname{sen} z$$

$$7. \frac{d}{dz} \tan z = \sec^2 z$$

$$8. \frac{d}{dz} \cot z = -\operatorname{csc}^2 z$$

$$9. \frac{d}{dz} \sec z = \sec z \tan z$$

$$10. \frac{d}{dz} \csc z = -\csc z \cot z$$

$$11. \frac{d}{dz} \log_e z = \frac{d}{dz} \ln z = \frac{1}{z}$$

$$12. \frac{d}{dz} \log_a z = \frac{\log_a e}{z}$$

$$13. \frac{d}{dz} \operatorname{sen}^{-1} z = \frac{1}{\sqrt{1-z^2}}$$

$$14. \frac{d}{dz} \cos^{-1} z = \frac{-1}{\sqrt{1-z^2}}$$

$$15. \frac{d}{dz} \tan^{-1} z = \frac{1}{1+z^2}$$

$$16. \frac{d}{dz} \cot^{-1} z = \frac{-1}{1+z^2}$$

$$17. \frac{d}{dz} \sec^{-1} z = \frac{1}{z\sqrt{z^2-1}}$$

$$18. \frac{d}{dz} \csc^{-1} z = \frac{-1}{z\sqrt{z^2-1}}$$

$$19. \frac{d}{dz} \operatorname{senh} z = \cosh z$$

$$20. \frac{d}{dz} \cosh z = \operatorname{senh} z$$

$$21. \frac{d}{dz} \tanh z = \operatorname{sech}^2 z$$

$$22. \frac{d}{dz} \coth z = -\operatorname{csch}^2 z$$

$$23. \frac{d}{dz} \operatorname{sech} z = -\operatorname{sech} z \tanh z$$

$$24. \frac{d}{dz} \operatorname{csch} z = -\operatorname{csch} z \coth z$$

$$25. \frac{d}{dz} \operatorname{senh}^{-1} z = \frac{1}{\sqrt{1+z^2}}$$

$$26. \frac{d}{dz} \cosh^{-1} z = \frac{1}{\sqrt{z^2-1}}$$

$$27. \frac{d}{dz} \tanh^{-1} z = \frac{1}{1-z^2}$$

$$28. \frac{d}{dz} \coth^{-1} z = \frac{1}{1-z^2}$$

$$29. \frac{d}{dz} \operatorname{sech}^{-1} z = \frac{-1}{z\sqrt{1-z^2}}$$

$$30. \frac{d}{dz} \operatorname{csch}^{-1} z = \frac{-1}{z\sqrt{z^2+1}}$$