

FORMULÁRIO DE DERIVADAS

$$1. y = k \Rightarrow y' = 0$$

$$2. y = x \Rightarrow y' = 1$$

$$3. y = u \pm v \pm w \Rightarrow y' = u' \pm v' \pm w'$$

$$4. y = kv \Rightarrow y' = kv'$$

$$5. y = v^n \Rightarrow y' = nv^{n-1}v'$$

$$6. y = u.v \Rightarrow y' = u.v' + u'.v$$

$$7. y = \frac{u}{v} \Rightarrow y' = \frac{v.u' - u.v'}{v^2}$$

$$8. y = a^v \Rightarrow y' = v'a^v \ln a$$

$$9. y = e^v \Rightarrow y' = v'e^v$$

$$10. y = \log_a v \Rightarrow y' = \frac{v'}{v \ln a}$$

$$11. y = \ln v \Rightarrow y' = \frac{v'}{v}$$

$$12. y = u^v \Rightarrow y' = v'.u^v \cdot \ln u + v.u^{v-1}u'$$

$$13. y = \operatorname{sen} v \Rightarrow y' = v' \cos v$$

$$14. y = \operatorname{cos} v \Rightarrow y' = -v' \operatorname{sen} v$$

$$15. y = \operatorname{tg} v \Rightarrow y' = v' \sec^2 v$$

$$16. y = \operatorname{cotg} v \Rightarrow y' = -v' \operatorname{cossec}^2 v$$

$$17. y = \operatorname{sec} v \Rightarrow y' = v' \operatorname{sec} v \operatorname{tg} v$$

$$18. y = \operatorname{cossec} v \Rightarrow y' = -v' \operatorname{cossec} v \operatorname{cotg} v$$

$$19. y = \operatorname{arcsen} v \Rightarrow y' = \frac{v'}{\sqrt{1-v^2}}$$

$$20. y = \operatorname{arccos} v \Rightarrow y' = -\frac{v'}{\sqrt{1-v^2}}$$

$$21. y = \operatorname{arctg} v \Rightarrow y' = \frac{v'}{1+v^2}$$

$$22. y = \operatorname{arccotg} v \Rightarrow y' = -\frac{v'}{1+v^2}$$

$$23. y = \operatorname{arcsec} v \Rightarrow y' = \frac{v'}{v\sqrt{v^2-1}}$$

$$24. y = \operatorname{arccossec} v \Rightarrow y' = -\frac{v'}{v\sqrt{v^2-1}}$$