

## Pravila za odvajanje

$$1. \quad (f(x) + g(x))' = f'(x) + g'(x)$$

$$2. \quad (f(x) \cdot g(x))' = f'(x) \cdot g(x) + f(x) \cdot g'(x)$$

$$3. \quad \left(\frac{f(x)}{g(x)}\right)' = \frac{f'(x) \cdot g(x) - f(x) \cdot g'(x)}{(g(x))^2}$$

$$4. \quad c' = 0$$

$$5. \quad x' = 1$$

$$6. \quad (x^n)' = nx^{n-1}$$

$$7. \quad (\sqrt{x})' = \frac{1}{2\sqrt{x}}$$

$$8. \quad (c \cdot f(x))' = c \cdot f'(x)$$

$$9. \quad (\sin x)' = \cos x$$

$$10. \quad (\cos x)' = -\sin x$$

$$11. \quad (\tan x)' = \frac{1}{\cos^2 x}$$

$$12. \quad (\cot x)' = -\frac{1}{\sin^2 x}$$

$$13. \quad (f(g(x)))' = f'(g(x)) \cdot g'(x)$$

$$14. \quad (\ln x)' = \frac{1}{x}$$

$$15. \quad (e^x)' = e^x$$

$$16. \quad (\log_a x)' = \frac{1}{x \cdot \ln a}$$

$$17. \quad (a^x)' = a^x \cdot \ln a$$

$$18. \quad (\arcsin x)' = \frac{1}{\sqrt{1-x^2}}$$

$$19. \quad (\arccos x)' = -\frac{1}{\sqrt{1-x^2}}$$

$$20. \quad (\arctan x)' = \frac{1}{1+x^2}$$

$$21. \quad (\operatorname{arc cot} x)' = -\frac{1}{1+x^2}$$