The original expression

$$6 \cdot x^x + \sin(x + x + \frac{5}{3 + 6 + x}) + x^x$$

After mental calculation:

$$(x^x)' = \log(x) \cdot 1 \cdot x^x + x \cdot 1 \cdot x^{x-1}$$

It is well known that:

$$(6 \cdot x^x)' = x^x \cdot 0 + 6 \cdot (\log(x) \cdot 1 \cdot x^x + x \cdot 1 \cdot x^{x-1})$$

Using WolframAlpha we have:

$$(x + x)' = 1 + 1$$

Every child knows that:

$$(3 + 6)' = 0 + 0$$

For a detailed explanation you should purchase the paid version:

$$(3 + 6 + x)' = 0 + 0 + 1$$

If you are familiar with calculus:

$$(\frac{5}{3 + 6 + x})' = \frac{(3 + 6 + x) \cdot 0 - 5 \cdot (0 + 0 + 1)}{(3 + 6 + x) \cdot (3 + 6 + x)}$$

It's not a secret that:

$$(x + x + \frac{5}{3 + 6 + x})' = 1 + 1 + \frac{(3 + 6 + x) \cdot 0 - 5 \cdot (0 + 0 + 1)}{(3 + 6 + x) \cdot (3 + 6 + x)}$$

After mental calculation:

$$(\sin(x+x+\frac{5}{3 + 6 + x}))' = (1+1+\frac{(3 + 6 + x) \cdot 0 - 5 \cdot (0 + 0 + 1)}{(3 + 6 + x) \cdot (3 + 6 + x)}) \cdot \cos(x+x+\frac{5}{3 + 6 + x})$$

It is well known that:

$$(6\cdot x^x+\sin(x+x+\frac{5}{3+6+x}))' = x^x\cdot 0+6\cdot(\log(x)\cdot 1\cdot x^x+x\cdot 1\cdot x^{x-1})+(1+1+\frac{(3+6+x)\cdot 0-5\cdot(0+0+1)}{(3+6+x)\cdot(3+6+x)})\cdot\cos(x+$$

Using WolframAlpha we have:

$$(x^x)' = \log(x)\cdot 1\cdot x^x + x\cdot 1\cdot x^{x-1}$$

Every child knows that:

$$(6\cdot x^x+\sin(x+x+\frac{5}{3+6+x})+x^x)' = x^x\cdot 0+6\cdot(\log(x)\cdot 1\cdot x^x+x\cdot 1\cdot x^{x-1})+(1+1+\frac{(3+6+x)\cdot 0-5\cdot(0+0+1)}{(3+6+x)\cdot(3+6+x)})\cdot\text{co}$$

The final expression

$$7\cdot\log(x)\cdot x^x+7\cdot x\cdot x^{x-1}+(\frac{(-5)}{(x+9)^2}+2)\cdot\cos(2\cdot x+\frac{5}{x+9})$$