So we are given an expression:

$$10 \cdot \left(x \cdot (x+1) \cdot x^4 \cdot (x+1) + x + x + x\right) \cdot 2 \cdot 5 \cdot 7$$

Let's differintiate it!

$$10 \cdot \left(x \cdot (x+1) \cdot x^4 \cdot (x+1) + x + x + x\right) \cdot 2 \cdot 5 \cdot 7$$

Uhhh, let's simplify it a bit...

Some evaluations leave us with

$$10 \cdot \left(x \cdot (x+1) \cdot x^4 \cdot (x+1) + x + x + x\right) \cdot 70$$

Let's reshuffle operands a bit

$$10 \cdot \left(x \cdot x^4 \cdot (x+1) \cdot (x+1) + x + x + x\right) \cdot 70$$

Here we fold in half the expression:

$$10 \cdot \left(x \cdot x^4 \cdot (x+1)^2 + x + x + x\right) \cdot 70$$

Here we fold in half the expression:

$$10 \cdot \left(x^5 \cdot (x+1)^2 + x + x + x\right) \cdot 70$$

Sprinkling out-of-brackets magic!

$$10 \cdot \left(x^5 \cdot (x+1)^2 + x \cdot 2 + x\right) \cdot 70$$

Let's reshuffle operands a bit

$$10 \cdot \left(x^5 \cdot (x+1)^2 + 2 \cdot x + x\right) \cdot 70$$

Sprinkling out-of-brackets magic!

$$10 \cdot \left(x^5 \cdot (x+1)^2 + x \cdot 3\right) \cdot 70$$

Let's reshuffle operands a bit

$$10 \cdot \left(x^5 \cdot (x+1)^2 + 3 \cdot x\right) \cdot 70$$

Let's reshuffle operands a bit

$$10 \cdot 70 \cdot \left(x^5 \cdot (x+1)^2 + 3 \cdot x\right)$$

So finaly:

$$700 \cdot \left(x^5 \cdot (x+1)^2 + 3 \cdot x\right)$$