So we are given an expression:

$$(x+7)\cdot(3+x)+(3+x)\cdot 2+(x+7)\cdot(9+x)$$

Let's simplify it!

Let's reshuffle operands a bit

$$(x+7)\cdot(x+3)+(3+x)\cdot 2+(x+7)\cdot(9+x)$$

Let's reshuffle operands a bit

$$(x+7)\cdot(x+3)+(x+3)\cdot 2+(x+7)\cdot(9+x)$$

Let's reshuffle operands a bit

$$(x+7)\cdot(x+3)+2\cdot(x+3)+(x+7)\cdot(9+x)$$

Let's reshuffle operands a bit

$$(x+7)\cdot(x+3)+2\cdot(x+3)+(x+7)\cdot(x+9)$$

Let's reshuffle operands a bit

$$(x+7)\cdot(x+3)+(x+7)\cdot(x+9)+2\cdot(x+3)$$

So finaly:

$$(x+7)\cdot(x+3)+(x+7)\cdot(x+9)+2\cdot(x+3)$$