| Model | | <i>K</i> = | = 1 | | K = 4 | | | | |
|--------------|-----|------------|-----|----|---------|---------|---------|---------|--|
| | t1 | t2 | t3 | t4 | t1 | t2 | t3 | t4 | |
| GPT-3.5 | 100 | 99 | 85 | 91 | 95 (-5) | 90 (-9) | 84 (-1) | 84(-7) | |
| Llama-3 70B | 100 | 99 | 97 | 99 | 100(0) | 99(0) | 96(-1) | 92(-7) | |
| Llama-2 70B | 100 | 96 | 69 | 77 | 88(-12) | 96 (0) | 63~(-6) | 46(-31) | |
| Qwen-1.5 72B | 100 | 94 | 52 | 70 | 66(-34) | 91(-3) | 28(-24) | 34(-36) | |

(a) Setting 1: Addition in original numerical form and in different languages where t1 = add, $t2 = add_in_en$, $t3 = add_in_en$, $t4 = add_in_es$.

| Model | | K=1 | | K = 3 | | | |
|--------------|-----|-----|-----|-------------|----------|----------|--|
| | t1 | t2 | t3 | t1 | t2 | t3 | |
| GPT-3.5 | 100 | 100 | 100 | 93 (-7) | 62 (-38) | 56 (-44) | |
| Llama-3 70B | 100 | 100 | 100 | 82(-18) | 90(-10) | 83(-17) | |
| Llama-2 70B | 97 | 94 | 90 | 75(-22) | 75(-19) | 50 (-40) | |
| Qwen-1.5 72B | 100 | 99 | 91 | $65\ (-35)$ | 87(-12) | 48(-43) | |

(b) Setting 2: Naming the capital, continent and capitalize the country name where t1 = capital, t2 = continent, t3 = capitalization.

| Model | | K = 1 | | | K = 3 | | | |
|--------------|-----|-------|-----|---------|--------|---------|--|--|
| | t1 | t2 | t3 | t1 | t2 | t3 | | |
| GPT-3.5 | 100 | 100 | 100 | 100 (0) | 97(-3) | 97(-3) | | |
| Llama-3 70B | 100 | 100 | 100 | 99(-1) | 100(0) | 99(-1) | | |
| Llama-2 70B | 100 | 100 | 95 | 95(-5) | 99(-1) | 84(-11) | | |
| Qwen-1.5 72B | 100 | 100 | 99 | 100(0) | 98(-2) | 98(-1) | | |

(c) Setting 3: t1 = copy(op1), t2 = copy(op2) and t3 = op1+op2.

| Model | K = 1 | | | | | K = 4 | | | |
|--------------|-------|----|-----|----|----------|-------------|--------|---------|--|
| | t1 | t2 | t3 | t4 | t1 | t2 | t3 | t4 | |
| GPT-3.5 | 100 | 87 | 100 | 54 | 94 (-6) | 56(-31) | 97(-3) | 12(-42) | |
| Llama-3 70B | 100 | 63 | 100 | 40 | 99(-1) | 29(-34) | 99(-1) | 13(-27) | |
| Llama-2 70B | 100 | 55 | 100 | 38 | 99(-1) | 35(-20) | 97(-3) | 7(-31) | |
| Qwen-1.5 72B | 100 | 62 | 100 | 34 | 89 (-11) | $30\ (-32)$ | 100(0) | 15(-19) | |

(d) Setting 4: First or last letter in upper or lower cases where $t1 = first_letter$, $t2 = last_letter$, $t3 = first_letter_cap$, $t4 = last_letter_cap$.

Table 2: Accuracy for each task in percentage, with the delta change given in parenthesis. For each setting we calculate the accuracy with prompts consisting of task examples of only one task (K=1 case) and with prompts consisting of examples from multiple tasks (K>1 case).