$$5 \quad 2$$

$$\underbrace{0101} \quad \underbrace{0010}$$

01010010   7 bit

53 : 2	1
26 : 2	0
13 : 2	1
6 : 2	0
3 : 2	1
1 : 2	1

110101

00110101

11001010

11001011

8 bit

1   2   8   +64   -128

01010010

11001010

A + B

overflow

```
  0 1 0 1 0 0 1 0
  0 0 1 1 0 1 0 1
-----------------
  1 0 0 0 0 1 1 1           riporto
```

```
5 7 : 2 | 1        Q1) 13/2/24
2 8 : 2 | 0
1 4 : 2 | 0        0 1 1 1 0 0 1
  7 : 2 | 1            7 bit
  3 : 2 | 1        1 0 0 0 1 1 1
  1 : 2 | 1
```

```
6 2 : 2 | 0
3 1 : 2 | 1
1 5 : 2 | 1        0 1 1 1 1 1 0
  7 : 2 | 1        1 0 0 0 0 0 1
  3 : 2 | 1                    1
  1 : 2 | 1        -------------
                   1 0 0 0 0 1 0
                        7 bit
```

$K = 7$

$V = -119$ $R = 9$

```
  1 0 0 0 0 1 0
    1 0 0 0 1 1 1
  ─────────────────
 ①0 0 0 1 0 0 1   -> 9
```

overflow

$$V - R = -128$$

Q₁) 20/01/24

1.) No, gli operandi sono discordi, si verifiche
rebbe overflow

2.) Si }
         } operandi concordi
3.) Si }

4.) Come 1.)

```
123 : 2 │1
 61 : 2 │1    0 1 1 1 1 0 1 1
 30 : 2 │0    1 0 0 0 0 1 0 0
 15 : 2 │1
  7 : 2 │1                  1
  3 : 2 │1    ──────────────────
  1 : 2 │1    1 0 0 0 0 1 0 1
```

```
120 : 2 │0
 60 : 2 │0    0 1 1 1 1 0 0 0
 30 : 2 │0    1 0 0 0 0 1 1 1
 15 : 2 │1                  1
  7 : 2 │1    ──────────────────
  3 : 2 │1    1 0 0 0 1 0 0 0
  1 : 2 │1
```

-123 -120

$$10000101$$
$$10001000$$
$$\overline{①\ 00001101}$$

→ overflow

123 -120

$$01111011$$
$$10001000$$
$$\overline{①\ 00000011}$$

riporto perduto

Q1) 12/01/23   -8 21   K=6

-5_{10} : 101 → 0101 → $\boxed{1011}$ → $\boxed{11111011}$

$-1C_{16}$: 1   C ~ 12

0001   1100   : 000 11100 → 11100011

$\boxed{11100100}$

A + B

$$11111011$$
$$11100111$$
$$\overline{①\ 11100010}$$

→ overflow

A - B

$$11111011$$
$$00011100$$
$$\overline{00010111}$$