

Grupo 5

5A.

$n = \text{par} \rightarrow \text{soma dos dígitos pares até } n \text{ (incluído)}$

a) $n = \text{ímpar} \rightarrow \text{" " " ímpares " " " " "}$

| | n | Soma | A | B | C | D | E |
|-------|-----|------|---|---|---|---|---|
| D_0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| D_1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 |
| D_2 | 2 | 2 | 0 | 0 | 0 | 1 | 0 |
| D_3 | 3 | 4 | 0 | 0 | 1 | 0 | 0 |
| D_4 | 4 | 6 | 0 | 0 | 1 | 1 | 0 |
| D_5 | 5 | 9 | 0 | 1 | 0 | 0 | 1 |
| D_6 | 6 | 12 | 0 | 1 | 1 | 0 | 0 |
| D_7 | 7 | 16 | 1 | 0 | 0 | 0 | 0 |
| D_8 | 8 | 20 | 1 | 0 | 1 | 0 | 0 |
| D_9 | 9 | 25 | 1 | 1 | 0 | 0 | 1 |

$$\text{Soma} \equiv (ABCDE)_2$$

b) Circuito codificador

$$A = D_7 + D_8 + D_9$$

$$B = D_5 + D_6 + D_9$$

$$C = D_3 + D_4 + D_6 + D_8$$

$$D = D_2 + D_4$$

$$E = D_1 + D_5 + D_9$$

