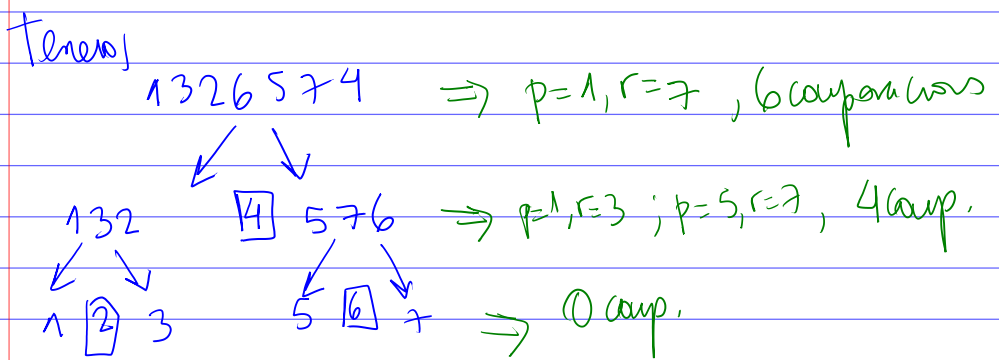


## Quickort (3pts)

Tomar 1, 3, 2, 6, 5, 7, 4

Tener

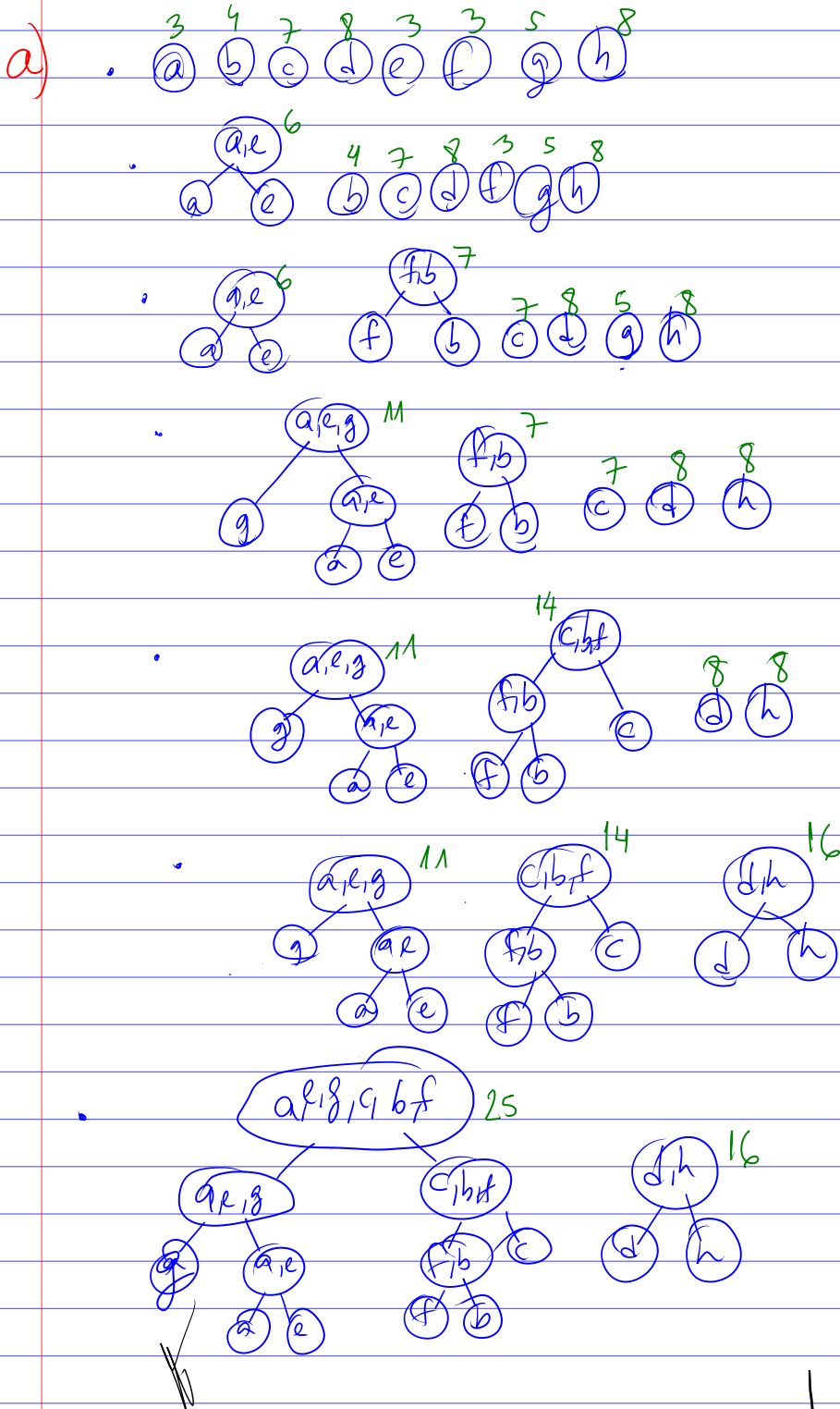


total: 10 comp

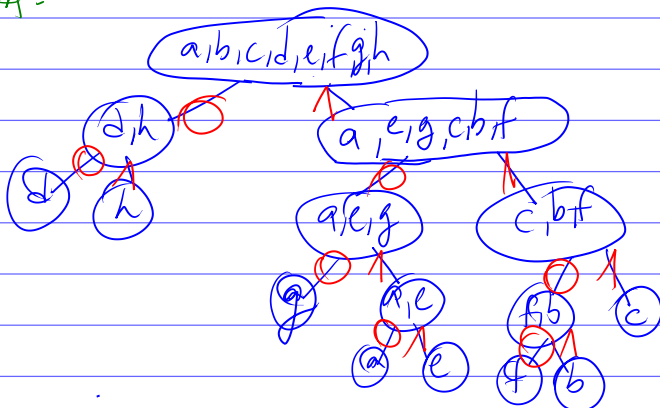
Es en mejor caso pues en cada llamada recursiva, el arreglo es dividido en dos partes iguales.

# Huffman (4pts)

| a | b | c | d | e | f | g | h |
|---|---|---|---|---|---|---|---|
| 3 | 4 | 7 | 8 | 3 | 3 | 5 | 8 |



WPTA =



b)

$$\text{Per } a = 3 \times 1 + 4 \times 4 + 7 \times 3 + 8 \times 2 + 3 \times 4 + 3 \times 4 + 5 \times 3 + 8 \times 2 = 120$$

$$\text{Per } a = (3 + 4 + 7 + 8 + 3 + 3 + 5 + 8) \times 3 = 123$$

7/11 - 5/1

|   |      |
|---|------|
| a | 1010 |
| b | 1101 |
| c | 111  |
| d | 00   |
| e | 1011 |
| f | 1100 |
| g | 100  |
| h | 01   |

## Modulo (37 pts)

a)

|         | $v$ | $w$ |
|---------|-----|-----|
| Item 1: | 60  | 10  |
| Item 2: | 100 | 20  |
| Item 3: | 120 | 30  |

$N = 50$

algoritmo:

|    |       |
|----|-------|
| 20 | \$100 |
| 10 | \$60  |

$$= \$160$$

óptimo:

|    |       |
|----|-------|
| 30 | \$120 |
| 20 | \$100 |

$$= \$220$$

b)

El caso entero es un caso particular del caso fraccionario. Luego, si  $opt_e$  es el óptimo entero y  $opt_f$  es el óptimo fraccionario, entonces

$$opt_e \leq opt_f$$

