Exercício 04:

a)

```
          10
         /  \
        5   20
         \   / \
        8  12 22
              \  \
             13 23
             /    \
           11     24
                  /
                18
```

b)

```
          12
         /  \
        5    20
         \    / \
        8   13 23
                  \
                  24
                  /
                18
```
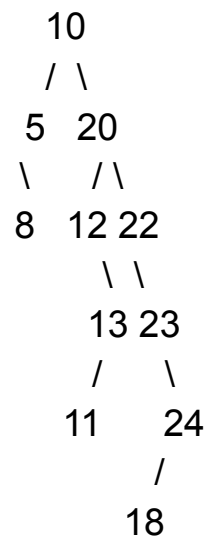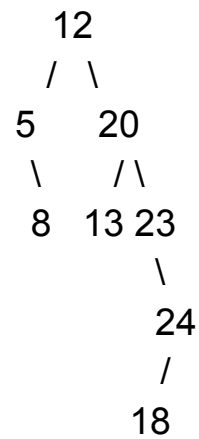
c)

- **Pré-ordem (raiz → esq → dir)**:
  10, 5, 8, 20, 12, 11, 13, 18, 22, 23, 24
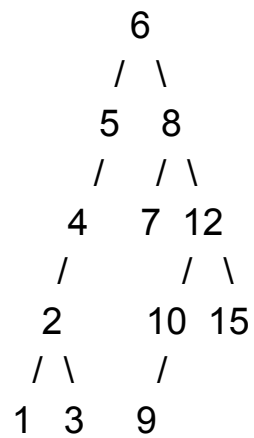
● **Pós-ordem (esq → dir → raiz)**:
    8, 5, 11, 18, 13, 12, 24, 23, 22, 20, 10
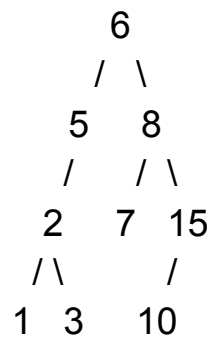
● **Ordem Central (esq → raiz → dir)**:
    5, 8, 10, 11, 12, 13, 18, 20, 22, 23, 24

Exercício 05:

a)

```
                6
               / \
              5   8
             /   / \
            4   7  12
           /      /  \
          2      10  15
         / \     /
        1   3   9
```

b)

```
                6
               / \
              5   8
             /   / \
            2   7  15
           / \     /
          1   3   10
```

c)

- **Pré-ordem (raiz → esq → dir):**
  6, 5, 4, 2, 1, 3, 8, 7, 12, 10, 9, 15

- **Pós-ordem (esq → dir → raiz):**
  1, 3, 2, 4, 5, 7, 9, 10, 15, 12, 8, 6

- **Ordem central (esq → raiz → dir):**
  1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 15