Ejercicio 1

```
SOLUCIÓN RECURSIVA-PAR:

3(2,5,8): [2, 8]
10(4,8,12): [4, 8, 12]
10(4,8(2,5,7),14): [2, 4, 14]
10(2,7(14,5(2,8,20),5)): [2, 20, 8, 14]
10(7(2,15),5(22,5(2,3)),11(12,_)): [2, 22, 12]
4(2,5,_): [2]
3(2(7,_),20(5,8),_): [8]
10(2(8,4(10,_)),3(5(7,9,11),14(_,5))): [8, 10]

SOLUCIÓN RECURSIVA-MENOR_QUE_CINCO:

3(2,5,8): [2]
10(4,8,12): [4]
10(4,8(2,5,7),14): [2, 4]
10(2,7(14,5(2,8,20),5)): [2]
10(7(2,15),5(22,5(2,3)),11(12,_)): [2, 3]
4(2,5,_): [2]
3(2(7,_),20(5,8),_): []
10(2(8,4(10,_)),3(5(7,9,11),14(_,5))): []

SOLUCIÓN ITERATIVA-PAR:

3(2,5,8): [2, 8]
10(4,8,12): [4, 8, 12]
10(4,8(2,5,7),14): [2, 4, 14]
10(2,7(14,5(2,8,20),5)): [2, 20, 8, 14]
10(7(2,15),5(22,5(2,3)),11(12,_)): [2, 22, 12]
4(2,5,_): [2]
3(2(7,_),20(5,8),_): [8]
10(2(8,4(10,_)),3(5(7,9,11),14(_,5))): [8, 10]

SOLUCIÓN ITERATIVA-MENOR_QUE_CINCO:

3(2,5,8): [2]
10(4,8,12): [4]
10(4,8(2,5,7),14): [2, 4]
10(2,7(14,5(2,8,20),5)): [2]
10(7(2,15),5(22,5(2,3)),11(12,_)): [2, 3]
4(2,5,_): [2]
3(2(7,_),20(5,8),_): []
10(2(8,4(10,_)),3(5(7,9,11),14(_,5))): []
```

Ejercicio 2

```
SOLUCIÓN RECURSIVA:

(4(2(1,3),11(5,12)),4): [4, 5, 11, 12]
(4(2(1,3),8(5,9)),1): [1, 2, 3, 4, 5, 8, 9]
(20(10(5,15),200(30,250)),20): [20, 200, 250, 30]
(8(3(1,6(4,7)),10(9,14)),10): [10, 14]
(200(50(45,105(55,120)),250(220,300)),100): [200, 120, 105, 250,
220, 300]
(10(7(5(2,6),8(7,9)),15(11(10,14),20(17,25))),15): [17, 20, 25,
15]
(100(50(40(30(10,35),45(42,48)),70(55(52,58),80(75,90))),120(110
(105(101,108),115(112,117)),150(130(125,135),180(155,200)))),150
): [180, 150, 200, 155]
(100(50(40(30(10,35),45(42,48)),70(55(52,58),80(75,90))),120(110
(105(101,108),115(112,117)),150(130(125,135),180(155,200)))),180
): [180, 200]
```

Ejercicio 3

```
SOLUCIÓN RECURSIVA:

10(4,7): ([10, 7],70)
8(14,7(1,5)): ([8, 7, 5],280)
11(5,6(1,5(2,3))): ([11, 6, 5, 3],990)
22(4(2,2),2(1,5(2,4))): ([22, 2, 5, 4],880)
9(4(2,1),2(1,5(2,3))): ([9, 2, 5, 3],270)
1(2(-1,-4(3,_)),10(-5(7(_,-2),4),-6)): ([1, 10, -5, 7, -2],700)
3(2(7,_),20(5,-8)): ([3, 20, 5],300)
1(2(8,4(10,_)),3(5(7,9),5(_,5))): ([1, 3, 5, 9],135)
```

Ejercicio 4

```
SOLUCIÓN RECURSIVA:

a(b,c): []
a(n(a,_),e,i,o,u): [ana]
o(s(a,e,i,o,u),p(i,e),r(o,t,s)): [oso, oro]
a(n(a,_),y(b,e(_,r)),m(e,a,t)): [ama, ana]
r(a(p(a(r)),d(a(_,r),i(o,_)),t),t,u(t(a))): [radar, rapar]
a(o,e(u,i(o(u,a),e(i,o)))): []
a(o(u,i),e(u(e,a),i(o,u))): []
a(e(i,a),i(o(u,i),a)): [aia, aea]
```

Ejercicio 5

SOLUCIÓN RECURSIVA:

```
4(2(1,3),_):    {Par=[2]}
4(2(1,3),11(5,20)):  {Par=[4, 2], Impar=[11]}
10(4,102): {Par=[10]}
5(4(1,8),2(1,3)):    {Par=[4, 2]}
12(7,3(1,5(2,3))):   {Impar=[3]}
10(3(2,1),1(1,5(2,3))):    {}
2(41(2,1),5(4,8(2,10))):   {Par=[8], Impar=[5]}
2(41(2,_),5(4,8(2,_))):    {Impar=[5]}
10(3(11(5,14),15(1,5(2,3))),5(4,8(2,12))): {Par=[8],  Impar=[11,
5]}
5(2(1,4),25(5,30)):  {Par=[2], Impar=[5, 25]}
```

SOLUCIÓN ITERATIVA FUNCIONAL:

```
4(2(1,3),_):    {Par=[2]}
4(2(1,3),11(5,20)):  {Par=[4, 2], Impar=[11]}
10(4,102): {Par=[10]}
5(4(1,8),2(1,3)):    {Par=[2, 4]}
12(7,3(1,5(2,3))):   {Impar=[3]}
10(3(2,1),1(1,5(2,3))):    {}
2(41(2,1),5(4,8(2,10))):   {Par=[8], Impar=[5]}
2(41(2,_),5(4,8(2,_))):    {Impar=[5]}
10(3(11(5,14),15(1,5(2,3))),5(4,8(2,12))): {Par=[8],   Impar=[5,
11]}
5(2(1,4),25(5,30)):  {Par=[2], Impar=[5, 25]}
```