Esercizio 9

```
En[m1_, m2_, mf1_, mf2_, mf3_, mf4_] :=
 Evaluate[((mf1 + mf2 + mf3 + mf4)^2 - m1^2 - m2^2) / (2 * m2) * 1.]

T[m1_, m2_, mf1_, mf2_, mf3_, mf4_] := Simplify[En[m1, m2, mf1, mf2, mf3, mf4] - m1]

Val[m1_, m2_, mf1_, mf2_, mf3_, mf4_] :=
 {En[m1, m2, mf1, mf2, mf3, mf4], T[m1, m2, mf1, mf2, mf3, mf4]}

mp := 135
mN := 938
mS := 1193
mL := 1116
mK := 497
mX := 1315

Val[mp, mN, mL, mK, 0, 0]
```

{908.156, 773.156}

```
Val[mp, mN, mS, mK, 0, 0]
```

{1043.73, 908.727}

```
Val[mp, mN, mN, mK, mK, 0]
```

{1510.96, 1375.96}

```
Val[mp, mN, mX, mK, mK, 0]
```

{2363.23, 2228.23}

```
Val[mN, mN, mL, mL, 0, 0]
```

{1717.56, 779.557}

```
Val[mN, mN, mS, mS, 0, 0]
```

{2096.65, 1158.65}

```
Val[mN, mN, mL, mK, mN, 0]
```

{2530.87, 1592.87}

```
Val[mN, mN, mS, mK, mN, 0]
```

{2743.44, 1805.44}

```
Val[mN, mN, mN, mN, mK, mK]
```

{3452.67, 2514.67}

```
Val[mN, mN, mX, mK, mK, mN]
```

{4681.94, 3743.94}