Esercizio 2

```
18.86 - 10.61 - 2.42
```

5.83

```
3.66 / Log[2]
```

5.28026

```
Sqrt[(2 (5.83 + 30)) / (3.727379378 * 10^3))]
```

0.138655

```
1.2 * 224^(1 / 3)
```

7.28781

```
5.280263849653606 * 24 * 60^2
```

456 215.

```
ScientificForm[456 215.]
```

4.56215×10^5

```
-1 / 2 * Log[456 214.79661007156 * 2 * 7.2878135325015885 * 10^(-15) / (0.14 * 299 792 458)]
```

18.1906

```
c := 299 792 458
```

```
GeigerNuttal[Q_, V_, m_, a_, G_] := Sqrt[(Q + V) / (2 * m * (a * 10^(-15))^2)] * Exp[-2 * G]
```

```
f[x_] := ArcCos[x^(1 / 2)] - (x - x^2)^(1 / 2)
```

```
a[Z_] := 1.2 * 10^(-15) * Z^(1 / 3)
```

```
bx[Zx_, Zy_, Qx_] := Zx * (Zy - Zx) * (200 * 10^(-15) / 137) / Qx
```

```
GxGa[Zx_, Zy_, mx_, Qx_, A_] := Sqrt[mx / Qx] * Zx * (Zy - Zx) f[a[A] / bx[Zx, Zy, Qx]] / (Sqrt[3.727379378 * 10^3 / 5.83] * 2 * 86 f[a[224] / bx[2, 88, 5.83]])
```

```
bx[6, 88, 26.41]
```

2.71961×10^{-14}

```
bx[6, 88, 30.59]
```

2.34798×10^{-14}

```
bx[2, 88, 5.83]
```

4.30694×10^{-14}

```
f[a[224] / bx[6, 88, 26.41]]
```

0.583778

```
f[a[224] / bx[6, 88, 30.59]]
```

0.517227

```
f[a[224] / bx[2, 88, 5.83]]
```

0.771921

```
GxGa[6, 88, 11.178 * 10^3, 26.41, 224]
```

1.76012

```
GxGa[6, 88, 13.043 * 10^3, 30.59, 224]
```

1.56522

```
1.7601173781798092 * 18.190597373828503
```

32.0176

```
1.5652247615419357 * 18.190597373828503
```

28.4724

```
GeigerNuttal[26.41, 30, 11.178 * 10^3, a[224], 32.017586557147546`]
```

3.1995×10^{8}

```
GeigerNuttal[30.59, 30, 13.043 * 10^3, a[224], 28.47237343675608`]
```

3.68494×10^{11}