In[2]:=
```
a = Series[(2 x^2 - 2 x + 1)/(x - 1)^4, {x, 0, 10}]
```

Out[2]= $1 + 2\,x + 4\,x^2 + 8\,x^3 + 15\,x^4 + 26\,x^5 + 42\,x^6 + 64\,x^7 + 93\,x^8 + 130\,x^9 + 176\,x^{10} + O[x]^{11}$

In[3]:=
```
b = CoefficientList[a, x]
```

Out[3]= {1, 2, 4, 8, 15, 26, 42, 64, 93, 130, 176}

In[6]:=
```
c = FindSequenceFunction[b, n]
```

Out[6]= $\frac{1}{6}\left(8\,n - 3\,n^2 + n^3\right)$

In[9]:=
```
For[i = 1, i ≤ 10, i++, Print["a [", i, "] = ", ReplaceAll[n → i][c]]]
```

```
a [1] = 1
a [2] = 2
a [3] = 4
a [4] = 8
a [5] = 15
a [6] = 26
a [7] = 42
a [8] = 64
a [9] = 93
a [10] = 130
```