

What's the Score?



- If you have any difficulty with these solutions, please contact your teacher before continuing.

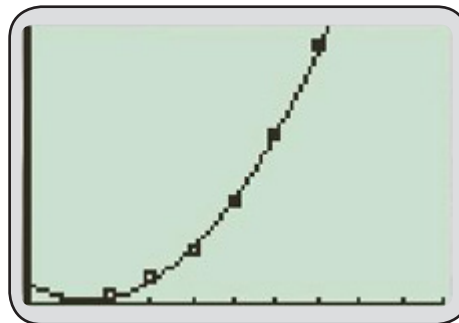
3. $L1 = x\text{-values} = \text{Position of pyramid}$
 $L2 = y\text{-values} = \text{Pyramidal number}$

WINDOW

Xmin= 0
 Xmax= 10
 Xscl= 1
 Ymin= 0
 Ymax= 150
 Yscl= 1
 Xres= 1

CubicReg

$y = ax^3 + bx^2 + cx + d$
 $a = .3333333333$
 $b = .5$
 $c = .1666666667$
 $d = -2E-11$
 $R^2 = 1$



Regression Equation: $y = 0.3x^3 + 0.5x^2 + 0.2x$

Note: $d = -2E-11 = -0.00000000002$. This is a very small number and it can be rounded to zero.

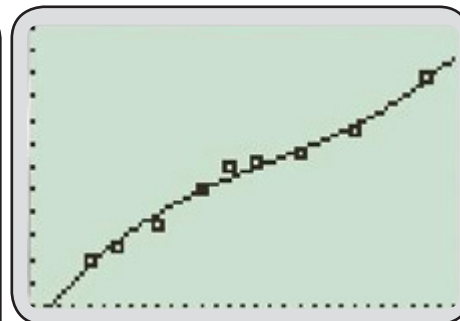
4. $L1 = x\text{-values} = \text{Age (months)}$
 $L2 = y\text{-values} = \text{Weight (kg)}$

WINDOW

Xmin= 15
 Xmax= 45
 Xscl= 1
 Ymin= 8
 Ymax= 20
 Yscl= 1
 Xres= 1

CubicReg

$y = ax^3 + bx^2 + cx + d$
 $a = 7.78902E-4$
 $b = -.0753080943$
 $c = 2.653764999$
 $d = -19.10155031$
 $R^2 = .9871024191$



Regression Equation (rounded to 4 decimal places):

$$y = 0.0008x^3 - 0.0753x^2 + 2.6538x - 19.1016$$

Note: Numbers should not be written in scientific notation when using standard form. In the above equation, the a value was converted by moving the decimal left four places.