

## “Rolling” or “Moving” Average

Given this set of 20 values:

[201, 130, 259, 207, 148, 256, 204, 224, 157, 286, 110, 260, 136, 188, 109, 55, 143, 286, 290, 16]

and using a “**window**” of 5:

[**201, 130, 259, 207, 148**, 256, 204, 224, 157, 286, 110, 260, 136, 188, 109, 55, 143, 286, 290, 16]

[**201, 130, 259, 207, 148**] = 945 ;  $945 / 5 = 189.0$  ← take a simple average to get our first value in our series of rolling averages (add 5 values and divide by 5)

Then **moving our window** and selecting the **next series of 5**:

[201, **130, 259, 207, 148, 256**, 204, 224, 157, 286, 110, 260, 136, 188, 109, 55, 143, 286, 290, 16]

[**130, 259, 207, 148, 256**] = 1000 ;  $1000 / 5 = 200.0$  ← our second value in our series of rolling averages

And the next:

[201, 130, **259, 207, 148, 256, 204**, 224, 157, 286, 110, 260, 136, 188, 109, 55, 143, 286, 290, 16]

[**259, 207, 148, 256, 204**] = 1074 ;  $1074 / 5 = 214.8$  ← our third value in our series of rolling averages

And so on:

[201, 130, 259, **207, 148, 256, 204, 224**, 157, 286, 110, 260, ... , 16]

[**207, 148, 256, 204, 224**] = 1039 ;  $1039 / 5 = 207.8$

[**148, 256, 204, 224, 157**] = 989 ;  $989 / 5 = 197.8$

[**256, 204, 224, 157, 286**] = 1127 ;  $1127 / 5 = 225.4$

[**204, 224, 157, 286, 110**] = 981 ;  $981 / 5 = 196.2$

[**224, 157, 286, 110, 260**] = 1037 ;  $1037 / 5 = 207.4$

[**157, 286, 110, 260, 136**] = 949 ;  $949 / 5 = 189.8$

[**286, 110, 260, 136, 188**] = 980 ;  $980 / 5 = 196.0$

[**110, 260, 136, 188, 109**] = 803 ;  $803 / 5 = 160.6$

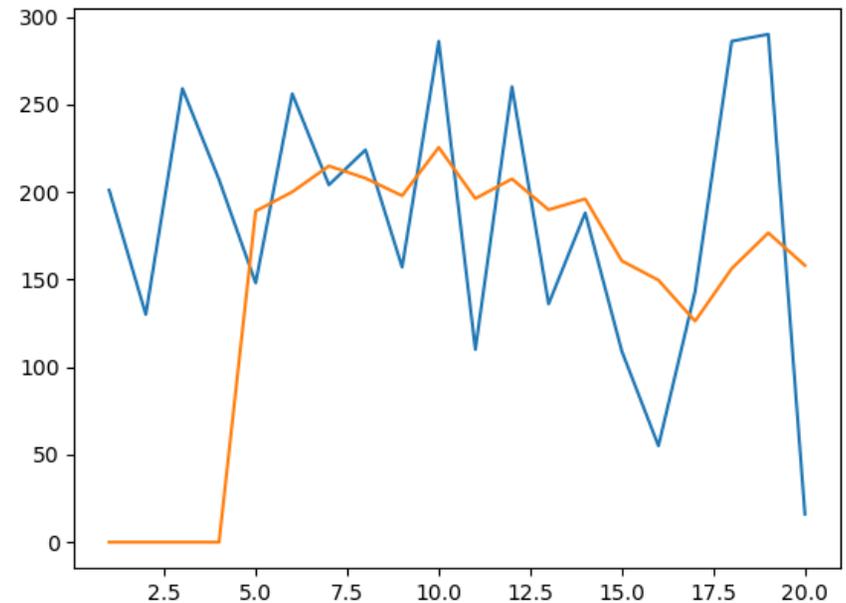
[**260, 136, 188, 109, 55**] = 748 ;  $748 / 5 = 149.6$

[**136, 188, 109, 55, 143**] = 631 ;  $631 / 5 = 126.2$

[**188, 109, 55, 143, 286**] = 781 ;  $781 / 5 = 156.2$

[**109, 55, 143, 286, 290**] = 883 ;  $883 / 5 = 176.6$

[**55, 143, 286, 290, 16**] = 790 ;  $790 / 5 = 158.0$



This set of values:

201	130	259	207	148	256	204	224	157	286	110	260	136	188	109	55	143	286	290	16
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	----	-----	-----	-----	----

is converted to this “smoother” set of values:

0	0	0	0	189.0	200.0	214.8	207.8	197.8	225.4	196.2	207.4	189.8	196.0	160.6	149.6	126.2	156.2	176.6	158.0
---	---	---	---	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------