Text

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|  |  |  |
| --- | --- | --- |
| Week | Demand | Forecast |
| 1 | 820 | 820 |
| 2 | 775 | = 820 |
| 3 | 680 | = 816 round up |
| 4 | 655 |  |
| 5 |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Table

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ROUND IT UP TO A WHOLE NUMBER

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Month | Sales | Simple Moving Average (n = 3) F |  |  |
| 1 | 220 | NA | NA | NA |
| 2 | 250 | NA | NA | NA |
| 3 | 210 | NA | NA | NA |
| 4 | 300 | 227 | 73 | 5329 |
| 5 | 325 | 254 | 71 | 5041 |
| TOTAL | | | 144 | 10370 |

;

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Month | Sales | Weighted Moving Average (n = 3) 0.6, 0.3, 0.1 F |  |  |
| 1 | 220 | NA | NA | NA |
| 2 | 250 | NA | NA | NA |
| 3 | 210 | NA | NA | NA |
| 4 | 300 | 210\*0.6+250\*0.3+220\*0.1 = 223 | 77 | 5929 |
| 5 | 325 | 300\*.6+210\*0.3+250\*.1 = 268 | 57 | 3249 |
| TOTAL | | | 134 | 9178 |

*Since the weighted moving average gives a lesser Mad/MSE, it is a better forecasting model.*

Try filling out the forecasts using exponential smoothing with alpha = 0.7. Compute the MAD and MSE. Is ES a better forecasting model?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Month | Sales | Exponential Smoothing  α= 0.7 |  |  |
| 1 | 220 |  |  |  |
| 2 | 250 |  |  |  |
| 3 | 210 |  |  |  |
| 4 | 300 |  |  |  |
| 5 | 325 |  |  |  |
|  | | |  |  |

A picture containing text, clock

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