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| --- | --- |
| Name.first | Julian |
| Name.last | Nam |
| Comment | Hey Mrs. knuth, I didn't get question 5. c and d Can you explain please?? :)  c.         Comment on any **limitations** in the model you have used and on the reliability of your prediction.    *You need to say when the model (equation) is useful for predicting values and when it isn't.  Is it accurate for interpolated values?  What about extrapolated values?  Does it account for the fact that the pendulum or spring had a decreasing amplitude as time went on and it ran out of energy?*    d.         **Identify any assumptions** made and discuss their effect on the predictions you made.    *Does your model assume the motion of the pendulum or spring never changes?  Is this realistic?  Does your model you made from the calculator use ALL the data and does this make a difference?  Does your model use enough data to be reliable (how many cycles did you use?).  What would happen if you used less, or more data?* |
| Name.first | Rachael |
| Name.last | Taylor |
|  | hey miss hope ur having a good day i just have 2 quick questions  1. the cure fit from the logger pro has 2 numbers e.g.. A=0.08967+/- 0.0009734 do we just use the first set of numbers ? ( i am pretty sure we on;y use the first number just wanted to check )  *the second number is just a measure of how much error there is between it and some of the data.  You can ignore it if it's that small.  If it was the same size as A you'd question the model.  So... just ignore it.*  2. when finding the period can we just use the number given to us from the auto fit or do we have to do something to it thanks heaps Rachael  *The period is harder to figure out from the calculator or loggerpro equation.*  *1.  Algebraic method*  *"B" on the calculator model is the same as 2π/C on the hand-drawn model.  so you can rearrange this to get C = 2π/B     this will be the period.*  *2.  Graphical method*  *YOu could also just put the equation into your Graphs page on calculator menu, and plot it and then use the analysis buttons to get the peak to peak distance from graph.* |
| Name.first | Stef |
| Name.last | VN |
| Comment | Miss, I am having some trouble with the Table in excel My Calculator  model has no negatives but My logger pro model has negatives all over i check that  i have put in the right numbers but i think of any thing else that i did wrong. Can you tell me what i am doing wrong?  Hi Stef    For the LoggerPro line - the period is fine so it's the amplitude that's the problem.  You have this in cell C2    =0.04+SIN(6.88\*A2+1.05) +0.249    It should be    =0.04\*SIN(6.88\*A2+1.05) +0.249  *(i.e.  get rid of that + sign and make it a times sign \*)*      For the Calculator line in D2 you have    =0.05+SIN(0.685\*A2+1.07) +0.249    there are two errors:    the + sign AND the 0.685 should be 6.85    After you fixed cell C2 and D2, select them and fill down.    I get the attached as the result (very good!)    See if you can draw two separate graphs with just each model and original only so you can see which is better. |
| Name.first | Georgia |
| Name.last | Rose |
| Comment | Hey Mrs Knuth, I was just wondering if you would prefer our assignment typed or hand written?  Georgia.  *It is probably just as easy to type it.  Yes, I'd prefer typed but it's not a requirement.*  *Also, check out my website as I've added answers to questions people asked and an Excel spreadsheet that allows you to draw a graph for Question 5.  You don't have to use it, but it might be easier.* |
| Name.first | Dean |
| Name.last | Edwards |
| Comment | Hey what were the things we used to collected the spring data  Dean  *LoggerPro software*  *motion sensor*  *retort stand*  *spring (15cm)*  *weigh boat (attached to bottom of spring to make a larger bottom surface for sensor to measure from)*    *I also sticky taped each end so it didn't jump off when spring recoiled.*    *note that best data was obtained when spring had been left to settle, after about 5 seconds.*    *N.B.  useful stuff on website for Question 5.* |
| Name.first | Caleb |
| Name.last | Kim |
|  | Mrs Knuth, Is question 5b about predicting a future value at a set time? Do I have to include a real-life example?  *Is there a good real life application of the spring or pendulum that you could talk about ?  I can think of a wrecking ball and a bungee cord but I don't think either is a great example.  So my answer is - NO - you just need to talk about how far ahead of the measured data you are using the model to predict a value.  half a second further, one period further, 10 seconds further.*    *THen in Q 5c you can say why it's reasonable or not, given that both lost energy and hence amplitude.  Maybe not good for peaks in the future, but fine for predicting when at centre value.* |