

4.5 Excel/Sheets Tutorial

Open up a blank Excel/Sheets document. Save the document in your FST folder called Lesson 4.5.

Excel/Sheets Basics

- Every cell on an excel/sheets sheet has it's own name. For example: _____
- This button in the far top left hand corner  does what?
- Two buttons that will help you fit your text into the boxes on the excel sheet are...

On the excel sheet you opened, rename your tab "Parent 1 vs. Parent 2" and change it to purple. Save the document. (Command S)

Recall Problem 1 from PS 4.3

This summer Alexa has exactly 6 weeks free to work and both Parent 1 and Parent 2 have offered her a job. Assume she works 6 weeks (5 days a week) for a total of 30 days. Who should Alexa work for?

Parent 1's Offer	Parent 2's Offer
Offers 1 penny day 1, 2 pennies day 2, 4 pennies day 3, 8 pennies on day 4, and so on.	Offers \$1000 day 1, \$1100 day 2, \$1200 day 3, \$1300 day 4, and so on.
Pattern?	Pattern?
Sequence: (circle one) Geometric or Arithmetic?	Sequence: (circle one) Geometric or Arithmetic?

1. Set up column titles in columns A – E.

A1 = Day Number B1= Parent 1 Payment C1 = Parent 1 Total D1 = Parent 2 Payment E1 = Parent 2 Total

2. Use a formula to generate day number in column A. Formula: _____

3. Write a recursive and explicit formula that describes Parent 1 and Parent 2's payment methods where $n =$ the day number and $a_n =$ the amount you get paid on day n .

Parent 1's Offer	Parent 2's Offer
Formula:	Formula:

4. Using the formulas above, set up how much money Parent 1 pays Alexa in column B and set up how much money Parent 2 pays Alexa in column D.

5. Use a formula to show how much TOTAL money Alexa earned from Parent 1 at the end of the n^{th} day in column C. Use a formula to show how much TOTAL money you've earned from Parent 2 at the end of the n^{th} day in column E.

6. Highlight the TOTAL amount of money Alexa will make from both parents on Day 30.

SAVE AND SEND YOUR EXCEL/Sheets FILE TO jschenkel@portergaud.edu

Parent 1 vs. Parent 2 Problem Analysis

1. So... Who should Alexa work for? *Is this what you originally thought?*
2. How much total money is Alexa making if she works for Parent 1?
3. How much total money is Alexa making if she works for Parent 2?
4. How much money would Alexa receive on day 16 from Parent 1?
5. On what day does the daily payment from Parent 1 SURPASS the daily payment from Parent 2?
6. On what day does your TOTAL amount of money from Parent 1 SURPASS the total from Parent 2?

7-8. Write the explicit geometric and arithmetic sequences formula for the situation.

Parent 1's Offer	Parent 2's Offer

9. Which type of sequences is going to grow faster?
10. Can you think of any real world jobs that have payments like this?