

You have won the grand prize in a contest and have two options for receiving your cash payment:

- (a) The “\$100-a-Day” plan, in which you receive \$1,000 immediately, plus \$100 per day for 20 days;
- (b) The “Double Your Money” plan, in which you receive \$0.01 immediately, and your winnings double every day for 20 days.

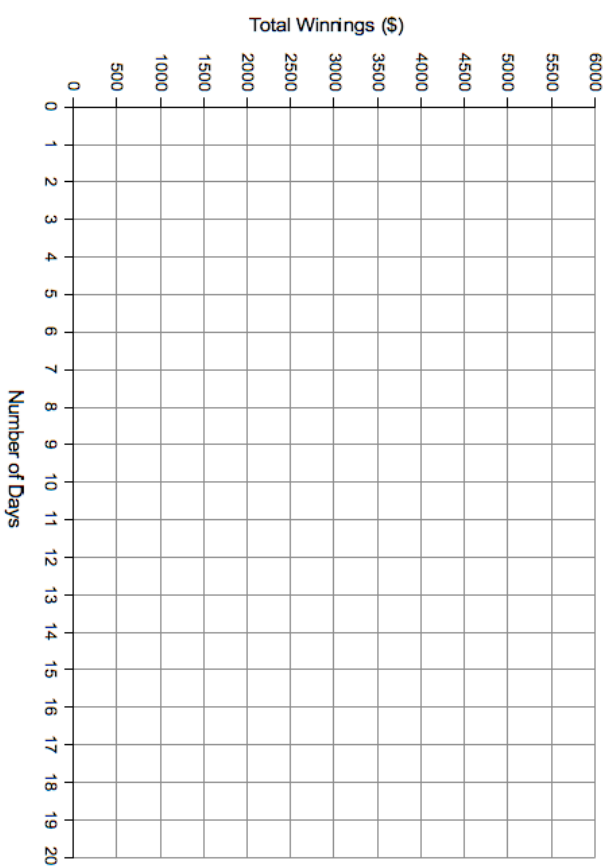
Which payment plan seems like the better deal? Why?

Complete the table below, which gives **total winnings** over time

Number of Days	\$100-a-Day Plan	Double Your Money Plan
0	\$1,000.00	\$0.01
1		
2		
3		
4		
5		
6		
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20		

Graph each of these functions on the grid provided.

Comparison of Total Winnings Under Two Plans



How much money will you have collected by day 20 with the \$100-a-Day plan? With the Double Your Money plan?

Which plan represents a linear function? Which plan represents an exponential function? Explain your answers.