Notice that the payments due are:

Day 1   1 *penny*

Day 2   2 *pennies*

Day 3 2^2 *pennies*

Day 4 2^3 *pennies*

...

Day 30 2^{29} *pennies*

On the last day alone the payment due is

$2^{29} = 536,870,912$ *pennies*

which, divide by 100 *gives*

you $5,368,709 *dollars*

And, we have to take into account all the money that was paid in the previous 29 days.

This is a Geometric Progression whose total sum is given by the formula:

$$S_n = \frac{a(1-r^n)}{1-r} = \frac{1(1-2^{30})}{1-2} = 1,073,741,823 \text{ } pennies$$

Which divided by 100 is $10,737,418.23

WOULD YOU BUY MY HOUSE?

My neighbor's house is identical to mine. He just sold his for $750,000

I'm selling mine to be paid in 30 days as follows:

Day 1   1 penney

Day 2   2 pennies

Day 3   4 pennies

and keep doubling the amount until you get to day 30

Do you think it would be a good deal for the buyer?

Can you calculate the total dollar amount paid?

Answer can be found in professorserna.com/answers