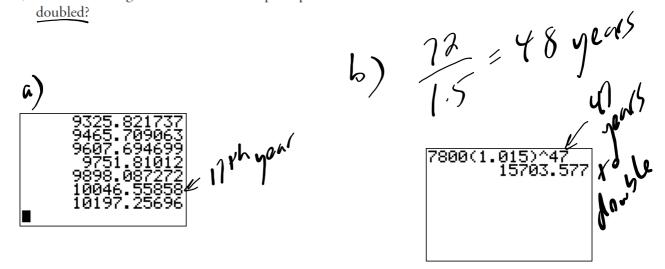
QUESTIONS...

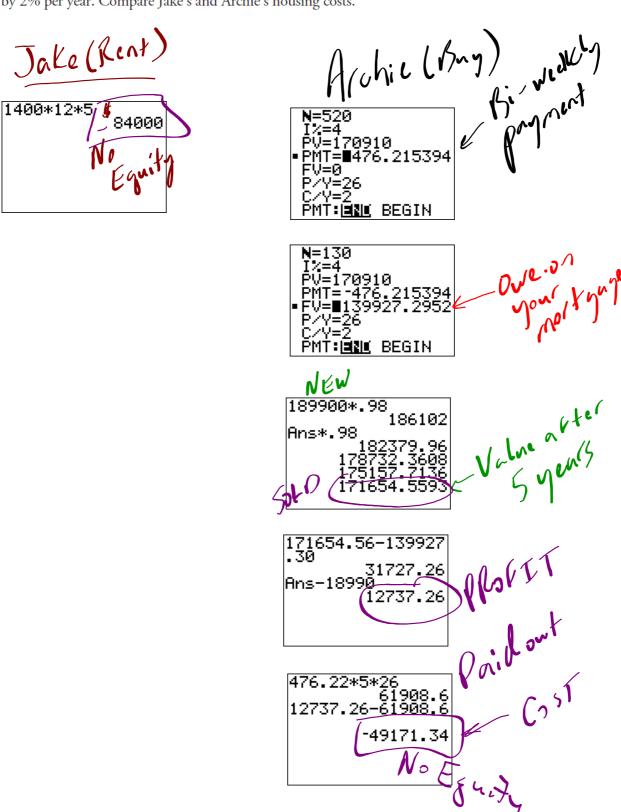
- 5. Susie purchased a limited edition print of a Robert Bateman painting
 - for \$7800. Bateman's prints appreciate, on average 1,5% annually.

 a) How long will Susie need to keep the print until its value exceeds
 - **b)** About how long will Susie need to keep the print until its value has doubled?



- 6. Jake and Archie are looking for places to live.
 - Jake decides to rent a house for \$1400 per month.
 - Archie buys a house for \$189 900, with a down payment of 10%. The
 bank has offered Archie a 20-year mortgage for the remainder of the cost,
 at 4% compounded semi-annually, with payments every two weeks.

Jake and Archie both move after 5 years. Archie's house has depreciated by 2% per year. Compare Jake's and Archie's housing costs.

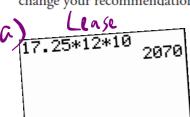


EXAMPLE 3 p. 562 Solving a problem that involves leasing or buying a water heater

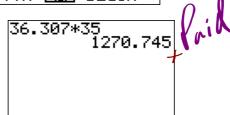
The 10-year-old hot water heater in Tom's home stopped working, so he needs a new one. Tom works for minimum wage. After paying his monthly expenses, he has \$35 **disposable income** left. He has an unused credit card that charges 18.7%, compounded daily. He has two options:

- Tom could lease from his utility company for \$17.25 per month. This would include parts and service.
- He could buy a water heater for \$712.99, plus an installation fee of \$250, using his credit card. He could afford to pay no more than \$35 each month.
- a) What costs are associated with buying and leasing?
- b) What do you recommend for Tom? Justify your recommendation.

c) Suppose that the life expectancy of a water heater is 8 years. Would this change your recommendation? Explain.







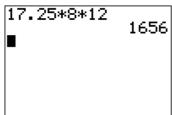


disposable income

The amount of income that someone has available to spend after all regular expenses and taxes have been deducted.

36 months

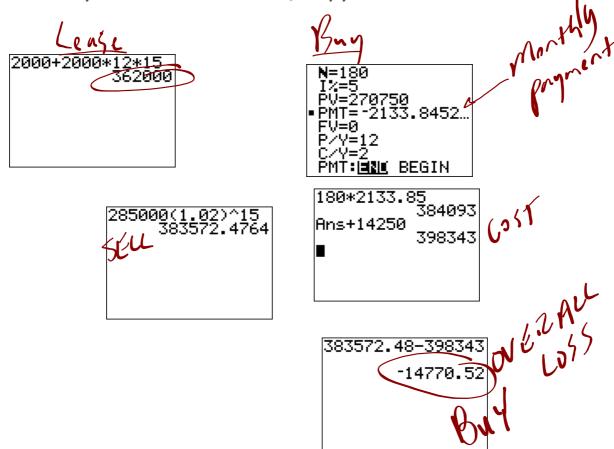
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EXAMPLE 4 Solving a problem that involves leasing or buying offi

Lance started his own construction business 2 years ago. His business has grown quickly, and his home office is no longer big enough. He is considering these two options:

- He could sign a 3-year lease on office space, with monthly rental payments of \$2000, and a refundable damage deposit of \$2000, but there is a penalty for breaking the lease.
- He could purchase a house for \$285 000 and renovate so it could be used as an office. A 5% down payment would be required, and he would take out a 15-year mortgage at 5%, compounded semi-annually, with monthly payments. Assume appreciation of 2% yearly.
- a) What are the costs of leasing over 15 years?
- b) What are the costs of buying over 15 years?
- c) What do you recommend for Lance? Justify your advice.



HOMEWORK: p. 569 #7, 8, 10