## **Quiz 18, Math 372**

## 11/13/25

You start with \$8,500. It doubles every 13 years.

- a) Find an exponential model.
- b) How long until the money reaches \$20,000? Round to the nearest hundredth of a year. c) What is the rate of growth of money at the beginning of the problem? (That is, when you have \$8,500.)

## Ans:

- a)  $M(t) = 8500 (2)^{t/13}$
- b) 16.05 years
- c) \$453/yr