Saving vs. Investing: Student Activity

The Time Value Of Money

This exercise helps understand how interest rates impact the cost of loans and how they can help save with a savings account! Check how a couple percentage points change the price of things by thousands of dollars & refer to the Saving Vs. Investing Module with any questions.

Question 1

Diane invests $500 that she earned and saved from her job working as a checkout cashier at Target. Her savings account offers her 7% interest.

A. How much will it be worth in 5 years?

B. What about if she waits 10 years?

C. Finally, how much will it be worth in 20 years?

D. How many times would Diane's $500 double if she waited 20 years?

Question 2

Now Diane finds a new savings account that will give her 10% interest on her $500.

A. How much more will Diane's account be worth in 5 years with the 10% interest account, than it would be worth with the 7% account?

B. What about after 20 years, using the information from your answer above?

Question 3

Elaine needs to save up $4,000 in 4 years. If she can set aside $1,000 today and find a savings account, what rate of return (or interest rate) does she need on that savings account, to grow her account from $1,000 to $4,000? **HINT:** She needs to double $1,000 twice to reach $4,000.

Question 4

Frank wants to buy a $10,000 car. The car dealer offers him financing of 60 equal payments, which will include the $10,000 purchase price, plus 9% interest. What will the dollar amount of each of these payments be?

Question 5

With the same information as above, the dealer has also offered to charge 8% interest, but Frank must pay back the loan in 48 equal payments. In this scenario, what will Frank's payments be?