

AUNT MABEL

This problem gives you the chance to:

- decide how Bill should reply to his Great Aunt Mabel's letter.

Bill receives a letter from his Great Aunt Mabel.

Dear Bill

Today is my 70th birthday. I have decided to give away some of my money each year to my relatives. You can each choose one of the following.

- 1. \$100 dollars now, \$90 next year, then \$80 the year after, and so on.*
- 2. \$10 dollars now, \$20 next year, then \$30 the year after, and so on.*
- 3. \$1 now, \$2 next year, \$4 the year after that, and so on, doubling each year.*

You will only receive money while I am alive.

Write to me soon and tell me how you want your money.

With love

Aunt Mabel

1. Bill starts to figure out how much he will receive from the first five payments if he chooses each of these three options.

Mabel's age	70	71	72	73	74	Total of 5 payments
Option 1	\$100	\$90	\$80	\$70	\$60	\$400
Option 2	\$10	\$20	\$30			
Option 3	\$1	\$2	\$4			

1. Fill in the empty boxes in the table above.

2. Which option do you think he should choose, based on the first 5 payments?

3. Bill thinks that his Great Aunt Mabel is likely to live until she is at least 80 years old. Continue your calculations up to this age. Then complete the table below

Mabel's age	75	76	77	78	79	80	Total from age 75 to 80
Option 1							
Option 2							
Option 3							

4. How do you think Bill should reply to Aunt Mabel's letter? Explain clearly which option you think Bill should choose. Show your reasons.
