

# Social Security Issues

Recently, my grandfather reached the age of 62 and has to make a decision concerning his social security benefits based on his income. He has asked me and you to help him with his decision. At the moment he has no major medical problems and is not on any medications.

There are many plans according to when you start taking benefits and one must make choices based on many facts that surround the circumstances at the time of the decisions.

Plan A - start collecting at age 62 at \$483/ month

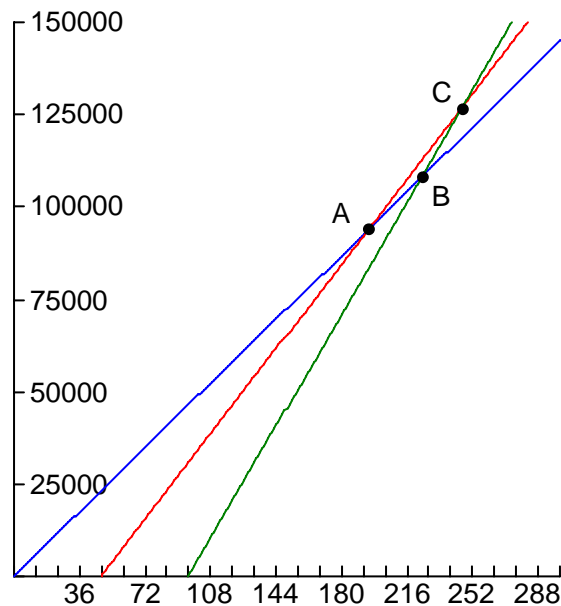
Plan B - wait and start collecting at age 66 at \$641/month

Plan C - wait longer and start collecting at age 70 at \$846/month

What should he do?

Let's look at the total amount collected over time with each plan

$$\begin{aligned} Pa(x) &:= 483 \cdot x \\ Pb(x) &:= 641 \cdot (x - 48) \\ Pc(x) &:= 846 \cdot (x - 96) \end{aligned}$$



## Questions to ask your students:

- How should the axes be labeled?
- What does each line represent?

**Discussion results:**

- If he waits until 66 to start taking benefits, the extra income of Plan B will not overtake Plan A until 195 months or  $195/12 = 16$  years.
- At age 78 (62+16), he now is better off waiting for Plan B.
- If he waits until 70, Plan C is better than Plan A only if he live for more than  $223/12$  or 18+ years and better than Plan B only if he lives for more than  $246/12$  or 20+ years.
- At 20+ years, he will be 82 years old.

| Year | AGE | Plan A<br>Total | Plan B<br>Total | Plan C<br>Total |
|------|-----|-----------------|-----------------|-----------------|
| 1    | 63  | 5796            | 0               | 0               |
| 2    | 64  | 11592           | 0               | 0               |
| 3    | 65  | 17388           | 0               | 0               |
| 4    | 66  | 23184           | 0               | 0               |
| 5    | 67  | 28980           | 7752            | 0               |
| 6    | 68  | 34776           | 15504           | 0               |
| 7    | 69  | 40572           | 23256           | 0               |
| 8    | 70  | 46368           | 31008           | 0               |
| 9    | 71  | 52164           | 38760           | 10152           |
| 10   | 72  | 57960           | 46512           | 20304           |
| 11   | 73  | 63756           | 54264           | 30456           |
| 12   | 74  | 69552           | 62016           | 40608           |
| 13   | 75  | 75348           | 69768           | 50760           |
| 14   | 76  | 81144           | 77520           | 60912           |
| 15   | 77  | 86940           | 85272           | 71064           |
| 16   | 78  | <b>92736</b>    | <b>93024</b>    | 81216           |
| 17   | 79  | 98532           | 100776          | 91368           |
| 18   | 80  | 104328          | 108528          | 101520          |
| 19   | 81  | <b>110124</b>   | 116280          | <b>111672</b>   |
| 20   | 82  | 115920          | 124032          | 121824          |
| 21   | 83  | 121716          | <b>131784</b>   | <b>131976</b>   |
| 22   | 84  | 127512          | 139536          | 142128          |

**More Questions:**

1. Does the person have income continuing at age 62 or 66? Does that mean that the person does not need assistance at this time?
2. Is there medical reasons that would cause the person to have to stop work and lose the regular income?

The decision made by this person will affect long term accumulation more than it does month to month income.

What do you think? What would you tell Grandpa?

What does this mean to you when you are 62?