

The age for full retirement benefits used to be 65. That was gradually changed so that now anyone born after 1960 must be 67 years old to receive full retirement benefits. At ages less than 67, the retiree would receive only partial retirement benefits.

EXAMPLE 4 Considering Retirement?



Suppose that you are 62 years old and are considering whether to retire with partial Social Security benefits or wait until you are 67 years old to receive full benefits.

- At age 62, you will receive 75% of \$1800 per month.
- At age 67, you will receive 100% of \$1900 per month.

How long would you have to live to make waiting for full benefits more economical? Assume a 3% cost-of-living increase each year.

SOLUTION

Social Security numbers are used to track workers' earnings over their lifetimes to pay benefits.

Use a spreadsheet to analyze this question.

| | A | B | C | D | E |
|----|------------|---------------------|---------------------|----------------------|---------------------|
| | Age | Retire Early | Total Income | Wait Until 67 | Total Income |
| 1 | 62 | \$1,350.00 | \$16,200.00 | \$0.00 | \$0.00 |
| 2 | 63 | \$1,390.50 | \$32,886.00 | \$0.00 | \$0.00 |
| 3 | 64 | \$1,432.22 | \$50,072.64 | \$0.00 | \$0.00 |
| 4 | 65 | \$1,475.19 | \$67,774.92 | \$0.00 | \$0.00 |
| 5 | 66 | \$1,519.45 | \$86,008.32 | \$0.00 | \$0.00 |
| 6 | 67 | \$1,565.03 | \$104,788.68 | \$1,900.00 | \$22,800.00 |
| 7 | 68 | \$1,611.98 | \$124,132.44 | \$1,957.00 | \$46,284.00 |
| 8 | 69 | \$1,660.34 | \$144,056.52 | \$2,015.71 | \$70,472.52 |
| 9 | 70 | \$1,710.15 | \$164,578.32 | \$2,076.18 | \$95,386.68 |
| 10 | 71 | \$1,761.45 | \$185,715.72 | \$2,138.47 | \$121,048.32 |
| 11 | 72 | \$1,814.29 | \$207,487.20 | \$2,202.62 | \$147,479.76 |
| 12 | 73 | \$1,868.72 | \$229,911.84 | \$2,268.70 | \$174,704.16 |
| 13 | 74 | \$1,924.78 | \$253,009.20 | \$2,336.76 | \$202,745.28 |
| 14 | 75 | \$1,982.52 | \$276,799.44 | \$2,406.86 | \$231,627.60 |
| 15 | 76 | \$2,042.00 | \$301,303.44 | \$2,479.07 | \$261,376.44 |
| 16 | 77 | \$2,103.26 | \$326,542.56 | \$2,553.44 | \$292,017.72 |
| 17 | 78 | \$2,166.36 | \$352,538.88 | \$2,630.04 | \$323,578.20 |
| 18 | 79 | \$2,231.35 | \$379,315.08 | \$2,708.94 | \$356,085.48 |
| 19 | 80 | \$2,298.29 | \$406,894.56 | \$2,790.21 | \$389,568.00 |
| 20 | 81 | \$2,367.24 | \$435,301.44 | \$2,873.92 | \$424,055.04 |
| 21 | 82 | \$2,438.26 | \$464,560.56 | \$2,960.14 | \$459,576.72 |
| 22 | 83 | \$2,511.41 | \$494,697.48 | \$3,048.94 | \$496,164.00 |

If you live past age 83, you will have received less total retirement income by retiring early. On the other hand, you will have had five additional years of retirement.

✓ Checkpoint

Help at Math.andYOU.com

Make a double bar graph showing columns C and E. Explain what the graph is showing.