

An expectant father wants to know how much money he'd have to put in the bank on the day his daughter is born so her college education will be paid for by the time she goes off to school. He estimates there's a 10% chance she will get admitted into an Ivy League school, which will cost \$80,000 per year for tuition, room, and board. There's a 30% chance she will get into a non-Ivy-League private school, which will cost \$35,000 per year. If she ends up at a public university, the cost will be \$19,000 per year. Assume these costs are incurred during the 18th, 19th, 20th, and 21st years and the money is invested in stocks that yield 6% above the inflation rate on average.