

Investing for Retirement

1. You put \$2,000 into a tax-deferred retirement account this year. Your marginal tax rate is 15%. How much did you save on this year's tax bill?
- a) \$150
 - b) \$300
 - c) \$1,700
 - d) \$2,000

SOLUTION:

Initial Investment: _____ x _____% marginal tax rate = _____ tax savings

2. You save \$500 in a retirement account at age 25. It increases an average of 10% per year until you are 65. Which formula and result indicates how much money you will have in this account at age 65?
- a) $500 \times (1 + 0.10)^{(65 - 25)} = \$22,629.63$
 - b) $500 \times (1 + (0.10 \times (65 - 25))) = \$2,500$

SOLUTION:


Just looking at the formula which one do you think is more likely if it increases 10% per year?

3. Your company has a plan that matches your retirement contributions up to 2% of your salary. Your annual salary is \$22,000. You are paid bi-weekly (26 times per year). How much should you contribute to the retirement account each pay period to take full advantage of the company match?
- a) \$11.22
 - b) \$13.92
 - c) \$15.29
 - d) \$16.92

SOLUTION:

Annual salary _____ x _____% company match = _____ contribution

Contribution _____ / _____ pay periods in a year = \$_____ each pay period




4. You are now 20 years old and hope to save \$500,000 for retirement at age 65. You are very unsure about the outlook for investment returns. If you assume no earnings on your investments, how much will you have to save each year?
- a) \$5,000
 - b) \$10,000
 - c) \$11,111
 - d) \$15,000

SOLUTION:

Start by calculating years until retirement: retirement age _____ - _____ current age = _____ years

Target savings _____ / _____ years until retirement = \$_____ each year savings to reach goal



5. You are considering a job that offers a pension of 80% of your highest yearly salary prior to retirement. You expect your highest yearly salary will be \$70,000. What amount of savings, earning 5% per year, would need to save in order to match the income from the pension?
- a) \$1,200
 - b) \$12,000
 - c) \$120,000
 - d) \$1,120,000

SOLUTION:

Highest yearly salary _____ x _____% pension percentage = \$_____pension income
Pension income _____ / _____% savings earnings = \$_____ total savings you would
need to be saved in order to match the income from the pension