Unit 5 Discussion Example – Post 1 Initial Thread

Money, Money, Money!

I will choose the balance of my savings to be $2000! At the end of all of this, I want to have $2000.

Please note you ONLY need to complete ONE scenario.

[Scenario 1]

    a) A = $2000.   I will choose r = 2% = 0.02 and t = 5 years. I want to solve for P.

    b) A = P + Prt

        2000 = P + P*0.02*5

        2000 = P + 0.1P

        2000 = 1.1P

        P = $1818.18

c) If I want to end up with $2000 given my rate and time, I will need to invest $1818.18. This is how much principal I need to invest.

Or **[Scenario 2]**

    a) A = $2000.   I know that P = $1500 and t = 5 years. I want to solve for r.

    b) A = P + Prt

        2000 = 1500 + 1500*r*5

        2000 = 1500 + 7500r

        500 = 7500r

        r = 0.067 or 6.7%

c) If I want to end up with $2000 given my principle and time, I will need to find an interest rate of 6.7%. This is the interest rate that I would need.

Or **[Scenario 3]**

    a) A = $2000.   I know that P = $1600 and r = 5% = 0.05. I want to solve for t.

    b) A = P + Prt

2000 = 1600 + 1600*0.05*t

2000 = 1600 + 80t

400 = 80t

t = 5 years

c) If I want to end up with $2000 given my principle and rate, I will need to wait 5 years. This is how many years I need to invest.