Foundations 12   Name: _____

A1. Millie invests $2350 at 7% per year simple interest.   Calculate the value of the investment after 5 years.

C1. Calculate the rate of return on Millie's investment.

A2. 8 years ago Julian invested $25 000 at 2.3% per annum simple interest. How much is his investment worth today?

B1. 10 years ago Raina bought a GIC that earned 4.5% per year simple interest. It is now worth $20 000. How much was the GIC originally bought for?

B2. Billy invested $3500 in a GIC that earns 5% per year simple interest.   The GIC is now worth $5000. For how many years was the money invested?

C2. Calculate the rate of return on Billy's investment.

D1. Danielle invests $2800 at 3.5% p.a. compounded annually for 4 years. Calculate the value of the investment.

E1. Determine the total interest earned on Danielle's investment.

F1. How long would it take for Danielle's investment to double in value? (Hint: use the rule of 72!)

D2. Sam invests $3000 for 10 years. Compare the following by calculating the value of the investments:

 a) 6% p.a. compounded semi-annually

 b) 6% p.a. compounded quarterly

 c) 6% p.a. compounded monthly

E2. Determine the total amount of interest earned for each of the questions in D2.

G1. Manuel would like to make an investment so that he'll have $9000 in 5 years.   The bank offers a rate of 2.5% p.a. compounded annually.   How much should he invest?

G2. Helen wants to invest some money so that her grandson Tim will have $25 000 for college in 18 years. The bank offers a rate of 4.2% p.a. compounded semi-annually. How much should she invest?

H1. Sally invests $2000 at 2.7% p.a. compounded monthly for 6 years. Use the TVM solver to determine the future value of her investment.

N =   FV =
I =   PY =
PV =   CY =
PMT =   BEGIN

H2. Sally wants her $2000 investment to grow to $3000 in those 6 years.   What interest rate will she need?

N =   FV =
I =   PY =
PV =   CY =
PMT =   BEGIN

H3.   Becky invests $5000 at 3.2% p.a. compounded quarterly.   She needs $8000 to buy a used car.   How long will it take until she has enough money to purchase the car?

N =   FV =
I =   PY =
PV =   CY =
PMT =   BEGIN

I1. Tony deposited $275 per month for 2 years.   If the account pays 1.75% p.a. compounded quarterly, how much will he have?

N =   FV =
I =   PY =
PV =   CY =
PMT =   BEGIN

I2.   Nicole invests $3000 per year at 7.2% p.a. compounded semi-annually.   How much will she have in 3 years?

N =   FV =
I =   PY =
PV =   CY =
PMT =   BEGIN

I3.   Samuel deposited a certain amount into his account every month. How much should he invest each month at 5% p.a. compounded annually in order to have $10 000 in 4 years?

N =   FV =
I =   PY =
PV =   CY =
PMT =   BEGIN

J1. Gabriel invested $7500 in a GIC for a 3 year term at 3.6% p.a. compounded semi-annually. At the end of the term, he transferred the money into a savings account that paid 2.4% p.a. compounded monthly.   During the time, he was also making regular monthly payments of $250 into a savings account that earned 3% p.a. compounded semi-annually. What was the total value of his investment after 5 years?

N =   N =   N =

I =   I =   I =

PV =   PV =   PV =

PMT =   PMT =   PMT =

FV =   FV =   FV =

P/Y =   P/Y =   P/Y =

C/Y =   C/Y =   C/Y =

BEGIN   BEGIN   BEGIN

Total: _____   Total: _____   Total: _____

Total Value of the investment: _____