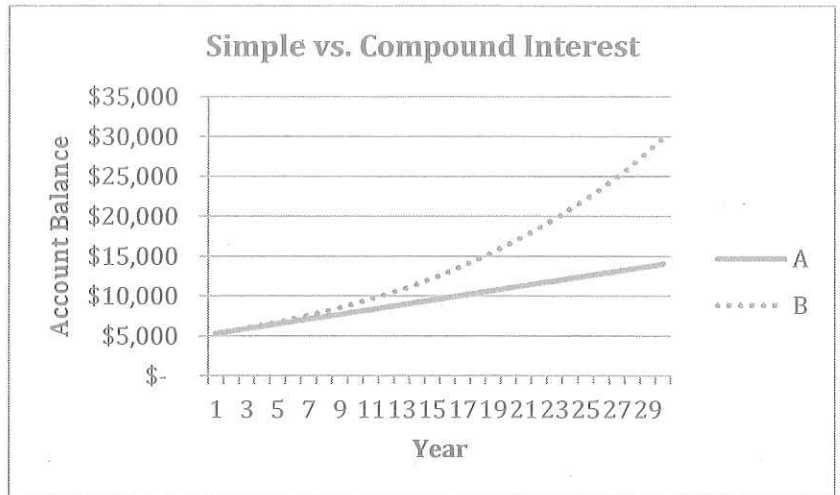


Write the letter of the graph that matches the type of interest.

- 1. Simple Interest A  
(Linear)
- 2. Compound Interest B  
(Exponential)



3. Write the letters in order from the type of compounding that would give the lowest amount to the type that would give the highest amount (assuming the same interest rate).

E / A / D / C / B

- A. Quarterly 4
- B. Continuously  $\infty$
- C. Daily 365
- D. Monthly 12
- E. Annually 1

Write the letter of the formula that you would use to solve the problem. Complete the calculation using a spreadsheet.

B 4. You deposit \$10,000 into an account that earns 5% interest, compounded quarterly, for 20 years.  
 $= FV(.05/4, 20*4, 0, 10000)$   
 $= \$27,014.85$

A 5. You loan a friend \$1,000 for 2 years at 3% simple interest.  
 $= 1000 + 1000 * .03 * 2$   
 $= \$1,060$

E 6. You want to compare an account that earns 5.4% interest compounded daily with an account that earns 6.2% compounded quarterly.  
 $= effect(.054, 365)$   
 $= .05548 \approx 5.5\%$

$= effect(.062, 4)$   
 $= .06346 \approx 6.3\%$

D 7. You deposit \$7,000 into an account that earns 8% interest compounded continuously for 10 years.  
 $= 7000 * exp(.08 * 10)$   
 $= \$15,578.79$

**Financial Formulas**

- A.  $= P + P * rate * years$
- B.  $= FV(rate, nper, pmt, [pv], [type])$
- C.  $= PV(rate, nper, pmt, [fv], [type])$
- D.  $= P * exp(rate * years)$
- E.  $= effect(nominal rate, periods per year)$