

|    | A | B | C   | D  | E                                     | F                  | G             |
|----|---|---|---|--|---------------------------------------|--------------------|---------------|
| 1  |   |   |   |  |                                       |                    |               |
| 2  |   |   |   | <b>COMPUTER PROJECT NO. 1</b>                            |                                       |                    |               |
| 3  |   |   |   | <b>FIN 411 - Intermediate Finance II - Dr. Michelson</b> |                                       |                    |               |
| 22 |   |   |   | Name:  | <b>SOLUTION</b>                       |                    |               |
| 23 |   |   | <b>Present Value of \$1.00</b>            |  |                                       |                    |               |
| 24 |   |   | <b>Interest Rate - Percent</b>            |  |                                       |                    |               |
| 25 |   |   | <b>Periods</b>                            | 1%   | 4%                                    | 6%                 | 10%           |
| 26 |   |   | 1   | <b>0.9901</b>  | <b>0.9615</b>                         | <b>0.9434</b>      | <b>0.9091</b> |
| 27 |   |   | 2   | <b>0.9803</b>  | <b>0.9246</b>                         | <b>0.8900</b>      | <b>0.8264</b> |
| 28 |   |   | 4   | <b>0.9610</b>  | <b>0.8548</b>                         | <b>0.7921</b>      | <b>0.6830</b> |
| 29 |   |   | 6   | <b>0.9420</b>  | <b>0.7903</b>                         | <b>0.7050</b>      | <b>0.5645</b> |
| 30 |   |   | 8   | <b>0.9235</b>  | <b>0.7307</b>                         | <b>0.6274</b>      | <b>0.4665</b> |
| 31 |   |   | 10  | <b>0.9053</b>  | <b>0.6756</b>                         | <b>0.5584</b>      | <b>0.3855</b> |
| 32 |   |   |   |  |                                       |                    |               |
| 33 |   |   | <b>Present Value Calculations</b>         |  | <b>Future Value Calculations</b>      |                    |               |
| 34 |   |   | Future Value                              | \$ (1,500.00)  | Present Value                         | (1,600.00)         |               |
| 35 |   |   | Years                                     | 8  | Years                                 | 8                  |               |
| 36 |   |   | Rate                                      | 14%  | Rate                                  | 14%                |               |
| 37 |   |   | Present Value                             | <b>\$525.84</b>  | Future Value                          | <b>\$4,564.14</b>  |               |
| 38 |   |   |   |  |                                       |                    |               |
| 39 |   |   | <b>Future Value of an Annuity</b>         |  | <b>Present Value of an Annuity</b>    |                    |               |
| 40 |   |   | Payment                                   | (1,600)  | Payment                               | (1,600)            |               |
| 41 |   |   | Interest Rate                             | 14%  | Interest Rate                         | 14%                |               |
| 42 |   |   | Number of Payments                        | 8  | Number of Payments                    | 8                  |               |
| 43 |   |   | Future Value                              | <b>\$21,172.42</b>                                       | Present Value                         | <b>\$7,422.18</b>  |               |
| 44 |   |   |   |  |                                       |                    |               |
| 45 |   |   | <b>Solving for <i>i</i> in an Annuity</b> |  | <b>Solving for an Annuity Payment</b> |                    |               |
| 46 |   |   | Present Value                             | (70,000)   | Present Value                         | 0                  |               |
| 47 |   |   | Future Value                              | 0  | Future Value                          | 70,000             |               |
| 48 |   |   | Annual Payment                            | \$ 7,550   | Number of Payments                    | 8                  |               |
| 49 |   |   | Number of Years                           | 17.00  | Interest Rate                         | 14.00%             |               |
| 50 |   |   | Annual Rate                               | <b>7.76%</b>   | Annual Payment Amount                 | <b>\$5,289.90</b>  |               |
| 51 |   |   |   |  |                                       |                    |               |
| 52 |   |   |   |  | <b>Solving for N in an Annuity</b>    |                    |               |
| 53 |   |   |   |  | Present Value                         | \$0                |               |
| 54 |   |   |   |  | Future Value                          | \$70,000           |               |
| 55 |   |   |   |  | Annual Payment                        | \$1,980            |               |
| 56 |   |   |   |  | Annual Rate                           | 12.50%             |               |
| 57 |   |   |   |  | Number of Years                       | <b>14.35</b>       |               |
| 58 |   |   |   |  |                                       |                    |               |
| 59 |   |   | <b>Uneven Cash Flow Streams</b>           |  | <b>Uneven Cash Flow Streams</b>       |                    |               |
| 60 |   |   | Year                                      | Cash Flow  | Year                                  | Cash Flow          |               |
| 61 |   |   | 0   | (13,500.00)  | 1                                     | 750                |               |
| 62 |   |   | 1   | 750  | 2                                     | 2,100              |               |
| 63 |   |   | 2   | 2,100  | 3                                     | 3,000              |               |
| 64 |   |   | 3   | 3,000  | 4                                     | 5,500              |               |
| 65 |   |   | 4   | 5,500  | 5                                     | 7,000              |               |
| 66 |   |   | 5   | 7,000  | Interest Rate                         | 14.00%             |               |
| 67 |   |   | Yield (or return)                         | <b>8.388%</b>  | Present Value                         | <b>\$11,190.71</b> |               |
| 68 |   |   |   |  | Future Value                          | <b>\$21,546.76</b> |               |
| 69 |   |   |   |  |                                       |                    |               |
| 70 |   |   |   |  |                                       |                    |               |
| 71 |   |   | <b>Non-Annual Compounding Periods</b>     |  |                                       |                    |               |
| 72 |   |   | Present Value                             | 1,000  |                                       |                    |               |
| 73 |   |   | Annual Rate                               | 16.00%   |                                       |                    |               |
| 74 |   |   | <b>Frequency</b>                          | <b>Periods/Year</b>                                      | <b>FV</b>                             |                    |               |
| 75 |   |   | Annual                                    | 1  | <b>1,160.00</b>                       |                    |               |
| 76 |   |   | Semiannual                                | 2  | <b>1,166.40</b>                       |                    |               |
| 77 |   |   | Quarterly                                 | 4  | <b>1,169.86</b>                       |                    |               |
| 78 |   |   | Bi-monthly                                | 6  | <b>1,171.05</b>                       |                    |               |
| 79 |   |   | Monthly                                   | 12   | <b>1,172.27</b>                       |                    |               |
| 80 |   |   | Bi-weekly                                 | 26   | <b>1,172.94</b>                       |                    |               |
| 81 |   |   | Weekly                                    | 52   | <b>1,173.22</b>                       |                    |               |
| 82 |   |   | Daily                                     | 365  | <b>1,173.47</b>                       |                    |               |
| 83 |   |   | Continuous                                | $\infty$   | <b>1,173.51</b>                       |                    |               |

