## TVM Calculator Examples with Videos

**Example 1:** what annual interest rate do you need in order to have \$20k in 5 years, assuming you start with \$10k investment? Answer 14.87%

| <u>Video</u> < <watch!< th=""></watch!<> |                   |                  |  |  |  |
|--|-------------------|------------------|--|--|--|
| TVM Calculator                           |                   | Advanced Version |  |  |  |
| Mode                                     | ● End ○ Beginning |                  |  |  |  |
| Present Value                            | -10,000           | PV               |  |  |  |
| Payments                                 |                   | PMT              |  |  |  |
| Future Value                             | 20,000            | FV               |  |  |  |
| Annual Rate (%)                          | 14.870            | Rate             |  |  |  |
| Periods                                  | 5                 | Periods          |  |  |  |
| Compounding                              | Annually 🗸        |                  |  |  |  |

**Example 2:** what is future value of \$4k in 4 years compounded annually at 4%? Answer:\$4679.43

Video <<watch!

| TVM Calculator  |                | Advanced Version |  |
|-----------------|----------------|------------------|--|
| Mode            | End OBeginning |                  |  |
| Present Value   | -4,000         | PV               |  |
| Payments        |                | PMT              |  |
| Future Value    | 4,679.43       | FV               |  |
| Annual Rate (%) | 4              | Rate             |  |
| Periods         | 4              | Periods          |  |
| Compounding     | Annually 🗸     |                  |  |
|                 |                |                  |  |
|                 | Reset          |                  |  |

**Example 3:** How much car can you afford? Assume you can afford a \$300 monthly note, and the bank will give you 60-month loan at 6% annual rate with no down payment. Answer: \$15,517.67

## <u>Video</u><<watch!

| <b>TVM</b> Calculator |                | Advanced Version |
|-----------------------|----------------|------------------|
| Mode                  | End OBeginning |                  |
| Present Value         | 15,517.67      | PV               |
| Payments              | -300           | РМТ              |
| Future Value          |                | FV               |
| Annual Rate (%)       | .5             | Rate             |
| Periods               | 60             | Periods          |
| Compounding           | Annually 🗸     |                  |
|                       |                |                  |
|                       | Reset          |                  |

Example 3: What is future value of \$2.4k annuity in 2 years compounded annually at 4 pct <u>Video</u> <<watch!

|                 | TVM Calculator    | Advanced Version |
|-----------------|-------------------|------------------|
| Mode            | ● End ○ Beginning |                  |
| Present Value   |                   | PV               |
| Payments        | -2,400            | PMT              |
| Future Value    | 4,896.00          | FV               |
| Annual Rate (%) | 4                 | Rate             |
| Periods         | 2                 | Periods          |
| Compounding     | Annually 🗸        |                  |
|                 |                   |                  |
|                 | Reset             |                  |