

Practice Using the TVM Solver

These questions provide extra practice for the Tech Tip on pages 52–53. Fill in the shaded boxes with the correct value(s) from your graphing calculator, then answer the question.

1. Shania is saving to buy a car. She wants to have \$5000 for the down payment in 10 months. She has an account that pays 2.4% interest per year.

a) How much does she need to save each month?

N: _____, I%: _____, PV: _____, PMT: _____,
FV: _____, P/Y: _____, C/Y: _____, PMT: END BEGIN

Amount she needs to save each month is the _____.

Amount she needs to save each month: _____.

- b) Shania gets a raise at her part-time job and decides to add another \$50/month to her savings. How long will it take her to save the money now?

N: _____, I%: _____, PV: _____, PMT: _____,
FV: _____, P/Y: _____, C/Y: _____, PMT: END BEGIN

Length of time is the _____.

Length of time it will take Shania to save \$5000: _____.

2. Sidney has been putting \$125/month in a savings account for 2 years. The account pays 3.4% interest compounded monthly. How much money will he have at the end of 2 years?

N: _____, I%: _____, PV: _____, PMT: _____,
FV: _____, P/Y: _____, C/Y: _____, PMT: END BEGIN

Amount saved: _____.



Name: _____ Date: _____

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(continued)

- 3.** Shari and Dave want to put a mini bathroom in their basement. Since they can do part of the work, they estimate that it will cost \$6000. Their account pays 2.25% interest per year, compounded monthly. Since they are both working, they can afford to save \$410 per month.

a) How long will it take Shari and Dave to save \$6000?

N: _____	I%: _____	PV: _____	PMT: _____
FV: _____	P/Y: _____	C/Y: _____	PMT: END BEGIN

Length of time to save \$6000: _____.

b) If the interest is raised to 2.75%, how long will it take?

N: _____	I%: _____	PV: _____	PMT: _____
FV: _____	P/Y: _____	C/Y: _____	PMT: END BEGIN

Length of time to save \$6000: _____.

c) At the interest rate in part b), what payment would they need to make if they already had \$1200 saved?

N: _____	I%: _____	PV: _____	PMT: _____
FV: _____	P/Y: _____	C/Y: _____	PMT: END BEGIN

Amount they need to save each month: _____.

d) If the interest rate is 2.5% and they have 15 months to save \$4800, how much would they need to save each month?

N: _____	I%: _____	PV: _____	PMT: _____
FV: _____	P/Y: _____	C/Y: _____	PMT: END BEGIN

Amount they need to save each month: _____.



Name: _____ Date: _____

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(continued)

- 4.** Caroline and Andrew want to redo their bedroom floor and paint the walls. They plan to do the painting themselves, but will hire someone to replace the old carpet with a floating floor. They estimate that it will cost \$2500 for paint, flooring, and installation. Their account pays 2.10% interest per year, compounded monthly. They can afford to save \$190 per month.

a) How long will it take Caroline and Andrew to save \$2500?

N: _____, **I%:** _____, **PV:** _____, **PMT:** _____,
FV: _____, **P/Y:** _____, **C/Y:** _____, **PMT: END BEGIN**

Length of time to save \$2500: _____.

b) When they check with the bank, they learn that the interest rate has gone down to 1.75%. How long will it take now?

N: _____, **I%:** _____, **PV:** _____, **PMT:** _____,
FV: _____, **P/Y:** _____, **C/Y:** _____, **PMT: END BEGIN**

Length of time to save \$2500: _____.

c) At the interest rate in part b), what payment would they need to make if they already had \$200 saved?

N: _____, **I%:** _____, **PV:** _____, **PMT:** _____,
FV: _____, **P/Y:** _____, **C/Y:** _____, **PMT: END BEGIN**

Amount they need to save each month: _____.

d) If the interest rate is 1.75% and they have 10 months to save \$2300, how much would they need to save each month?

N: _____, **I%:** _____, **PV:** _____, **PMT:** _____,
FV: _____, **P/Y:** _____, **C/Y:** _____, **PMT: END BEGIN**

Amount they need to save each month: _____.

