

# LESSON 16.4 Estimating College Costs and Payments

**TEKS**  
**Personal financial literacy—8.12.G** Estimate the cost of a two-year and four-year college education, including family contribution, and devise a periodic savings plan for accumulating the money needed to contribute to the total cost of attendance for at least the first year of college.

## ESSENTIAL QUESTION

How do you estimate the cost of a college education?

### Estimating the Cost of a College Education

The cost of a college education is affected by many factors, such as if you attend school in state or out of state and if you plan to live on campus, off campus, or at home. The total cost of a college education includes the cost of tuition, room and board, and textbooks.



#### EXAMPLE 1

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June wants to attend Texas A&M University-Kingsville, near Corpus Christi, Texas. She is 18, single, does not have any dependents, and lives in Dallas. She was raised by her single father, a contractor who makes \$81,000 per year and pays roughly 12% income tax. For the past 4 years, June has worked part time at the local bookstore, earning a taxable annual income of \$15,000, which is taxed at roughly 8%. June has 2 brothers, both of whom are in middle school.

How much should June expect to spend if she plans on completing a four-year degree program at A&M University-Kingsville while living in on-campus housing?

**STEP 1** Find the cost of attending Texas A&M University-Kingsville for 1 year using the values in the table.

Tuition & Fees	\$6,940
Room & Board	\$7,086
Books	\$1,300
Other	\$5,170
<b>Total</b>	<b>\$20,496</b>

Other costs can include parking, transportation, and entertainment.

**STEP 2** Compute the cost of attending the university for 4 years.

$$\$20,496 \times 4 = \$81,984$$

The estimated cost of June attending for 4 years is \$81,984.

#### Reflect

- How can June help to pay for her education?

Sample answer: She can get a part-time job on campus.

She could start saving, if she hasn't already. She can

apply for grants and scholarships.

#### YOUR TURN

- June is also considering attending Del Mar College in Corpus Christi to get a 2-year associate's degree. Estimate the cost of June attending Del Mar College. Use the college's website or another online tool to find the figures for an out-of-district student. **Sample answers are given.**

Tuition & Fees	\$4,230
Room & Board	\$6,000
Books	\$1,215
Other	\$0
<b>Total</b>	<b>\$11,445</b>

$11,445 \times 2 = 22,890$ ; two years at Del Mar will cost about \$22,890.

- Suppose June earns an associate's degree from Del Mar and then transfers to Texas A&M University-Kingsville for two more years to complete a bachelor's degree. Estimate the total amount that the 4 years of school will cost.

$(11,445 \times 2) + (20,496 \times 2) = 63,882$ ; the four years will cost about \$63,882.

- Approximately how much less would it cost June to attend Del Mar for two years and A&M Kingsville for two years than to attend A&M Kingsville for four years?

$81,984 - 63,882 = 18,102$ ; it would cost about \$18,102 less.

## Devising a Savings Plan for College

You can reduce the cost of your college education by applying for grants and scholarships. Another way to lower the cost of a college education is to start a college savings account.

### EXPLORE ACTIVITY



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As we saw in Example 1, it will cost June an estimated \$81,984 to attend Texas A&M University-Kingsville for 4 years. Let's apply the savings from June's scholarship, the money her father can contribute to her education, and the funds from her college savings account, to find a more accurate estimated total remaining cost.

- A** June received a scholarship, and has been awarded \$2,000 each year for 4 years. Find the new estimated total cost of June's college education.

After subtracting the funds from the scholarship from the total cost of her college education, what estimated amount will June pay?

\$73,984

- B** June's father has put aside \$11,000 for June's college expenses. Find the new estimated total remaining cost of June's education.

After applying her father's contribution to her education expenses, what estimated remaining amount will June pay?

\$62,984

- C** At the beginning of each of the 4 years of high school, June put \$4500 of her bookstore income into a savings account. The account earns interest at a rate of 2.5%, compounded annually. Complete the table to find how much June has in her college savings account at the beginning of her freshman year of college.

Year	Beginning balance	Amount deposited	New balance	Amount of interest earned (at 2.5%)	Ending balance
1	\$0	\$4,500	\$4,500	$4,500 \times 0.025 = \$112.50$	\$4,612.50
2	\$4,612.50	\$4,500	\$9,112.50	\$227.81	\$9,340.31
3	\$9,340.31	\$4,500	\$13,840.31	\$346.01	\$14,186.32
4	\$14,186.32	\$4,500	\$18,686.32	\$467.16	\$19,153.48

After applying June's savings to her education expenses, what estimated remaining amount will June pay?

\$43,831

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### EXPLORE ACTIVITY (cont'd)

#### Reflect

5. Does June have enough in her savings account to cover her first year at Texas A&M University-Kingsville without help from her father or a scholarship? What about with the scholarship?

1 year will cost an estimated \$20,496, and she only has

\$19,153, so she cannot cover her first year with her savings account alone. However, with the scholarship, she will have \$21,153 and will be able to pay for her first year.

6. If June had been able to deposit \$5,000 a year instead of \$4,500, earning the same annual interest rate of 2.5%, would she have enough saved to pay for her first year?

Yes; she would have saved \$21,282.

### Guided Practice

Ronan, a 19-year-old male from Texas, has been accepted at the University of Texas at Austin. If he attends the University of Texas, he plans to live at home with his mother, a single parent. His mother is a nurse who makes roughly \$60,000 a year and pays roughly 13% in taxes annually. Ronan has never had a job. (Example 1, Explore Activity) Sample answer are given.

- Use the table and an online tool to estimate the cost of Ronan attending the University of Texas for 1 year.
- Estimate the cost of Ronan getting a 4-year degree from the University of Texas. \$57,800
- Ronan has been granted a scholarship for \$1,500 per year. His mother has saved \$21,000 for Ronan's college education. Recalculate the estimated remaining cost of Ronan's degree.  $57,800 - (1,500 \times 4) - 21,000 = \$30,800$

Tuition & Fees	\$9,794
Books	\$904
Other	\$3,752
<b>Total</b>	<b>\$14,450</b>



#### ESSENTIAL QUESTION CHECK-IN

4. What are some things to consider when estimating the cost of college?  
Sample answer: Will you attend an in-state or out-of-state school? Do you plan on living at home? Do you have any savings? Were you awarded any scholarships or grants?

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