Move to page 1.2.

Suppose you have decided to rent your beach condo to vacationers during the year. The rental prices you have decided on vary according to the day of the week and season. To encourage weekly rentals, you also offer a special weekly rate. During the summer, the condo is only available to rent on a weekly basis. Page 1.3 and the table below show all the rental rates for the beach condo.

	Weeknight	**Weekend**	**Weekly**
Spring	$150	$175	$1,000
Summer			$1,300
Fall	$150	$175	$1,000
Winter	$100	$150	$700

1. Represent the rental rates for the condo using a 4 × 3 matrix. Keep the seasons in the same order as in the table above. Name the matrix *A*.

Move to page 1.6.

2. Use the up/down arrows on page 1.6 to check your answer to Question 1. What do the two zeros in the matrix represent?

Move to page 1.7.

The information shows the numbers of weeknights, weekend nights, and weeks the beach condo was rented in each season during the first year.

	Weeknight	**Weekend**	**Weekly**
Spring	15	14	3
Summer	0	0	8
Fall	12	10	4
Winter	9	6	2

3. Create a 3 × 4 matrix representing the rental data above. Keep the seasons in the same order as in the table above. Name the matrix *B*.

Move to page 1.11.

4. Use the up/down arrows on page 1.11 to check your answer to Question 3. What do the columns and rows represent?

5. Is it possible to multiply matrices *A* and *B*? How can you tell?

6. If matrix *A* was multiplied by matrix *B*, what would be the dimensions of the resulting matrix? Explain.

7. Find [*A*] · [*B*]. Show your work below.

Move to page 1.16.

8. Use the up/down arrows on page 1.16 to check your answer to Question 7. How would you label each of the rows and columns?

9. What numbers in the matrix on page 1.16 represent the amount of rent collected in each of the four seasons?

10. What was the total amount of rent collected during the first year?