

6. Koko is organizing an overnight camping trip. The cost to rent a campsite is \$20. The cost of food is \$9 per person.
- How much will the trip cost if 5 people go? 10 people go?
 - Write a relation for the cost of the trip when p people go.
 - Suppose the cost of food doubles.
Write a relation for the total cost of the trip for p people.
 - Suppose the cost of the campsite doubles.
Write a relation for the total cost of the trip for p people.
 - Explain why using the variable p is helpful.



7. **Assessment Focus** A pizza with cheese and tomato toppings costs \$8.00. It costs \$1 for each extra topping.
- Write a relation for the cost of a pizza with e extra toppings.
 - What is the cost of a pizza with 5 extra toppings?
 - On Tuesdays, the cost of the same pizza with cheese and tomato toppings is \$5.00. Write a relation for the cost of a pizza with e extra toppings on Tuesdays.
 - What is the cost of a pizza with 5 extra toppings on Tuesdays?
 - How much is saved by buying the pizza on Tuesday?



8. Write a relation for the pattern rule for each number pattern.
Let n represent any term number.
- 4, 8, 12, 16, ...
 - 7, 8, 9, 10, ...
 - 0, 1, 2, 3, ...

9. **Take It Further**

- For each number pattern, how is each term related to the term number?
- Let n represent any term number. Write a relation for the term.

a)	Term Number	1	2	3	4	5	6
	Term	3	5	7	9	11	13
b)	Term Number	3	4	5	6	7	8
	Term	7	10	13	16	19	22
c)	Term Number	2	3	4	5	6	7
	Term	5	9	13	17	21	25

Reflect

How did your knowledge of patterning help you in this lesson?