

BIG IDEAS

For Your Notebook

Big Idea 1

Writing and Evaluating Algebraic Expressions

The cost of admission for one student at a planetarium is \$6. You can use a verbal model to write an expression for the total cost of admission for any number of students.



An expression is $6s$. Because $\frac{\text{dollars}}{\text{student}} \cdot \text{students} = \text{dollars}$, the expression produces an answer in dollars. The expression is reasonable.

Big Idea 2

Using Expressions to Write Equations and Inequalities

You can use symbols to write an equation or inequality that compares the expression $6s$ to another expression.

The total cost of admission to the planetarium for s students at a rate of \$6 per student is \$150.

$$6s = 150 \quad \text{Equation}$$

The total cost of admission to the planetarium for s students at a rate of \$6 per student is no more than \$150.

$$6s \leq 150 \quad \text{Inequality}$$

Big Idea 3

Representing Functions as Verbal Rules, Equations, Tables, and Graphs

You can use a verbal description, an equation, a table, or a graph to represent a function.

Words The total cost (in dollars) of admission to the planetarium is 6 times the number of students.

Equation

$$C = 6s$$

Table

Input, s	Output, C
0	0
1	6
2	12
3	18

Graph

