

1 EXAMPLE Write an algebraic expression for “the sum of n and 8.”

“Sum” indicates addition. Add the first number, n , and the second number, 8. $n + 8$

2 EXAMPLE Define a variable and write an algebraic expression for “ten more than twice a number.”

Relate: ten more than twice a number

Define: Let y = the number.

Write: $2 \cdot \text{ y } + 10$

$2y + 10$

3 EXAMPLE Write an equation to show the total income from selling tickets to a school play for \$5 each.

Relate: The total income is 5 times the number of tickets sold.

Define: Let t = the number of tickets sold.

Let i = the total income.

Write: i = $5 \cdot \text{ t }$

$i = 5t$

4 EXAMPLE Write an equation for the data in the table.

| | | | | |
|---------|----|-----|-----|-----|
| Gallons | 4 | 6 | 8 | 10 |
| Miles | 80 | 120 | 160 | 200 |

Relate: Miles traveled equals 20 times the number of gallons.

Define: Let m = the number of miles traveled.

Let g = the number of gallons.

Write: m = $20 \cdot \text{ g }$

$m = 20g$