

2-1 Practice

Writing Equations

Translate each sentence into an equation.

1. Fifty-three plus four times b is as much as 21.
2. The sum of five times h and twice g is equal to 23.
3. One fourth the sum of r and ten is identical to r minus 4.
4. Three plus the sum of the squares of w and x is 32.

Translate each sentence into a formula.

5. Degrees Kelvin K equals 273 plus degrees Celsius C .
6. The total cost C of gas is the price p per gallon times the number of gallons g .
7. The sum S of the measures of the angles of a polygon is equal to 180 times the difference of the number of sides n and 2.

Translate each equation into a sentence.

8. $r - (4 + p) = \frac{1}{3}r$

9. $\frac{3}{5}t + 2 = t$

10. $9(y^2 + x) = 18$

11. $2(m - n) = x + 7$

Write a problem based on the given information.

12. a = cost of one adult's ticket to zoo

$a - 4$ = cost of one children's ticket to zoo

$$2a + 4(a - 4) = 38$$

13. c = regular cost of one airline ticket

$0.20c$ = amount of 20% promotional discount

$$3(c - 0.20c) = 330$$

14. **GEOGRAPHY** About 15% of all federally-owned land in the 48 contiguous states of the United States is in Nevada.

If F represents the area of federally-owned land in these states, and N represents the portion in Nevada, write an equation for this situation.

15. **FITNESS** Deanna and Pietra each go for walks around a lake a few times per week. Last week, Deanna walked 7 miles more than Pietra.

a. If p represents the number of miles Pietra walked, write an equation that represents the total number of miles T the two girls walked.

b. If Pietra walked 9 miles during the week, how many miles did Deanna walk?

c. If Pietra walked 11 miles during the week, how many miles did the two girls walk together?