

Section 1.5

Constructing Algebraic Expressions

Operation	Key words
Addition	Sum, plus, greater than, increased by, more than, exceeds, total of
Subtraction	Difference, minus, less than, decreased by, subtracted from, reduced by, the remainder
Multiplication	Product, multiplied by, twice, times, percent of
Division	Quotient, divided by, ratio, per, fraction, half, third
Equals	Equals, is

Examples

Translate the following phrases into an algebraic expression.

1. One third of a number x .
2. 7 less than a number y .
3. 8 more than 4 times a number n .
4. The sum of 9 and three times a number x , all divided by 26
5. Three-sevenths of a number z .
6. 37 percent of a number m .
7. The amount of money in dollars represented by q quarters, d dimes, n nickels, and p pennies.
8. The distance traveled in 7 hours at a speed of r miles per hour.
9. The total hourly wage for an employee when the base pay is \$9.75 per hour plus 50 cents for each of q units produced.
10. The sum of four consecutive odd integers, the first of which is $2n+1$.