

## Practice: Modelling With Algebra

- Write an algebraic expression for each phrase.
  - double a number
  - triple a number
  - quadruple a number
  - one half of a number
  - one third of a number
  - one quarter of a number
- Write an algebraic expression for each phrase.
  - 6 more than a number
  - a number increased by 3
  - 2 increased by a number
  - 5 decreased by a number
  - 7 less than a number
  - a number decreased by 6
- Write an algebraic expression for each phrase.
  - 4 more than triple a number
  - half a number, less 5
  - quadruple a number decreased by 1
  - 2 less than double a number
- Write an equation for each phrase.
  - triple a number is 18
  - 7 more than a number is 11
  - half a number is 10
  - double a number, less 3 is 7
  - 5 less than one third a number is 1
  - 2 more than triple a number is 14
- The sum of two consecutive integers is 47.
  - Let  $x$  represent the lesser integer. Write an algebraic expression to represent the greater integer.
  - Write an equation to represent the sum of the integers.
  - Find the integers.
- The sum of three consecutive odd integers is 57.
  - Let  $x$  represent the least integer. Write an algebraic expression to represent each of the other integers.
  - Write an equation to represent the sum of the integers.
  - Find the integers.
- Three consecutive even integers have a sum of 102.
  - Write an algebraic expression to represent each integer.
  - Write an equation to represent the sum of the integers.
  - Find the integers.
- Katherine is 2 years older than Christine. The sum of their ages is 16.
  - Write an algebraic expression for each girl's age.
  - Write an equation to represent the sum of their ages.
  - How old is each girl?
- The length of a rectangle is triple its width. The perimeter of the rectangle is 40 cm. What are the length and width?