Freelance Computer Programmer

A computer programmer translates commands into code, a language that a computer understands. Programmers work on a variety of tasks, from creating computer games to testing software. A freelance programmer doesn’t work for a specific company; this gives the freelancer more flexibility with his or her work schedule. Computer programmers use mathematical logic when writing or altering code.

If you are interested in a career as a computer programmer, you should study these mathematical subjects:

- Algebra
- Geometry
- Trigonometry
- Calculus
- Discrete Math

Research other careers that require the understanding of mathematical logic.

**ACTIVITY** At the end of the unit, check out how freelance computer programmers use math.
The Power of 2

The Unit Project at the end of this unit will give you an opportunity to see how quickly multiples of 2 increase in magnitude. You will multiply 2 by itself 20 times, and for each product look for a real-world representation of that product. To successfully complete the Unit Project you’ll need to master these skills:

- Understand exponents.
- Calculate powers of integers.

1. Consider a number greater than 2. Which do you think is larger, the sum if you add a number to itself 10 times, or the product if you multiply the number by itself 10 times? Explain.

2. Jonathan said he could use the Distributive Property to find the product below. Was he right? Explain.

\[ 5 \times (5 \times 5) = (5 \times 5) \times (5 \times 5) = 25 \times 25 = 625 \]

Tracking Your Learning Progression

This unit addresses important California Common Core Standards in the Critical Areas of understanding algebraic expressions and solving equations and inequalities.

**Domain 6EE** Expressions and Equations

**Cluster** Apply and extend previous understandings of arithmetic to algebraic expressions.

The unit also supports additional standards.

**Domain 6EE** Expressions and Equations

**Cluster** Reason about and solve one-variable equations and inequalities.