NorthSouth Foundation

PARENT INFORMATION SESSION

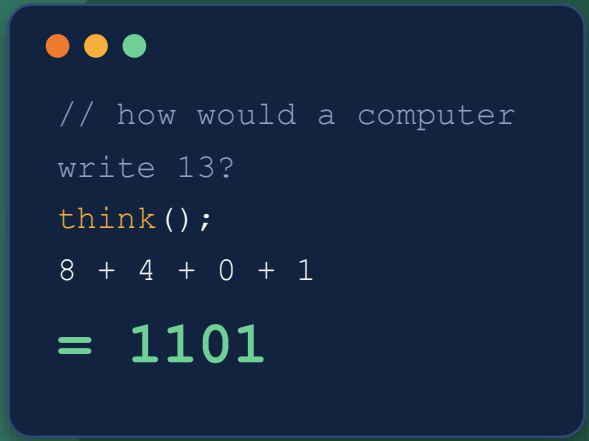
Think. Solve. Compete.

ACSL 2026–27 · American Computer Science League

Sunday, October 25, 2026 · 4:00 PM ET / 3:00 PM CT / 1:00 PM PT · Virtual

GRADES 3–9

BEGINNERS WELCOME

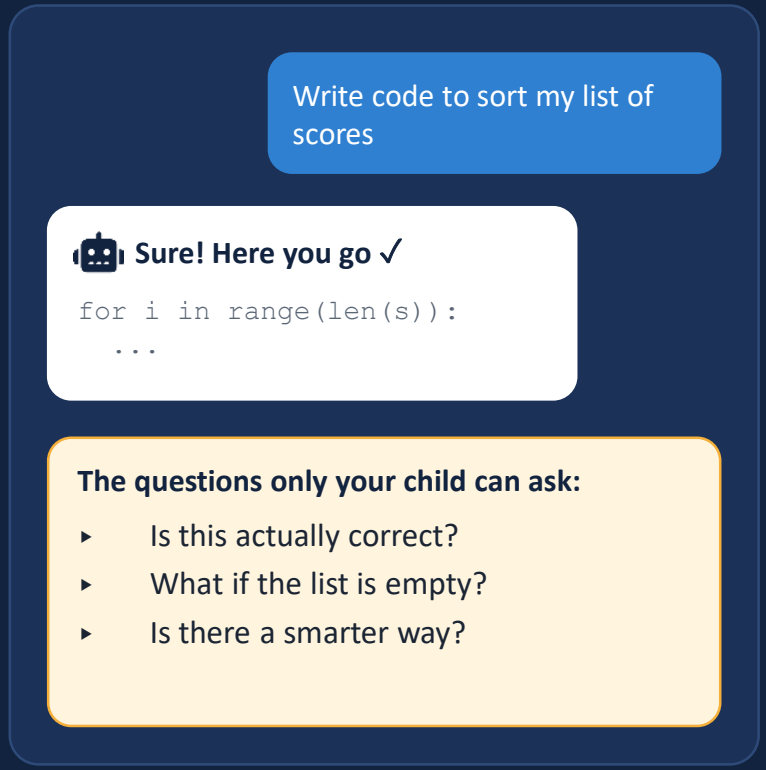


NorthSouth Foundation

WHY THIS MATTERS NOW

Our kids can get an answer in seconds. Can they tell if it’s right?

AI tools can write an essay, an app, even code. That's exciting, and it changes what our children need to be good at: understanding the problem, judging the answer, and knowing what to do when it's wrong.



NorthSouth Foundation

EASY ANSWERS, DEEPER THINKING

When answers get easy, thinking is the edge

What AI makes easy

- Producing an answer
- Writing code that looks right
- Finishing the assignment fast

→

What still has to come from your child

- **Understanding the problem**
- **Spotting a wrong or weak answer**
- **Explaining why it works**
- **Sticking with a hard problem**

Calculators didn't make number sense less important — they made it more important. ***Computational thinking works the same way in an age of AI.***

NorthSouth Foundation

0100 0101 1001 1000
1010 0011 0010 0110
0100 1001 0001 0100
1011 0000 0011 1000

LET'S TRY ONE · 20 SECONDS

How would a computer write 13 using only 0s and 1s?

No coding background needed. Just look for a pattern.

A 1010

B 1101

C 1110

Type A, B or C in the chat

NorthSouth Foundation

THE REVEAL

It’s B: 1101, and the reasoning is the real skill

1	1	0	1
worth 8	worth 4	worth 2	worth 1

8 + 4 + 0 + 1 = 13

Each place is worth double the one to its right. A 1 means “count it.”

That “aha” moment is ACSL

1. **Discover** the rule
2. **Apply** it to a new problem
3. **Explain** why it works

NorthSouth Foundation

WHAT ACSL IS

A real competition, with coaching built around it

4

OFFICIAL ACSL CONTESTS

across the school year

A TYPICAL CODING CLASS

- Watch a lesson
- Follow along
- Finish a project

NORTHSOUTH ACSL

Learn
a concept with a coach

Practice
contest-style problems

Compete
in the official contest

Strong individual results can lead to an invitation to the ACSL Finals. That depends on performance and is never guaranteed.

NorthSouth Foundation

WHAT STUDENTS EXPLORE

The ideas behind computing, not just typing code

Number systems

How computers store information

```
13  →  1101
```

Boolean logic

The rules behind every decision

```
TRUE AND NOT FALSE = ?
```

Graphs & networks

Finding connections and paths

```
A → B → D  or  A → C → D?
```

Program tracing

Predicting what code will do

```
if x > 5: x = x * 2
```

Topics vary by contest and division. Junior adds recursion, data structures and a programming challenge.

NorthSouth Foundation

WHAT YOUR CHILD WALKS AWAY WITH

Habits that last longer than any one technology



Big, scary questions become small steps

Breaking problems down



Testing assumptions, not trusting blindly

Checking the answer



Trying, debugging, trying again

Persistence



Saying why, not just what

Explaining their thinking



Sharing ideas with peers and coaches

Learning with a team



Facing a new problem without panic

Confidence with the unfamiliar

NorthSouth Foundation

WHERE WE STARTED

A small pilot, real student growth

2025–26 PILOT

Louisville

Pittsburgh

Two chapters tested the model: virtual coaching, practice and official contests.

STUDENT RECOGNITIONS

Krishang Thiyagarajan

Elementary Division · Bronze

Saanvi Jain

Junior Division · Silver

This year: taking what we learned to families nationwide

NorthSouth Foundation

DIVISIONS

A starting point for beginners and growing coders

ELEMENTARY

Grades 3–6

- **30-minute contest, 6 problems**
- No programming on the test
- Starts with logic & number systems

JUNIOR

Typically Grades 7–9

- **30-minute short-answer contest**
- + separate 72-hour coding challenge
- Programming support where needed

No prior coding experience required to enroll. Final division placement follows official ACSL rules.

NorthSouth Foundation

ELEMENTARY DIVISION · GRADES 3–6

Elementary: one topic per contest, six problems each

CONTEST 1

Computer Number Systems

Binary, octal and hexadecimal numbers

CONTEST 2

Prefix / Infix / Postfix Notation

Different ways to write a math expression

CONTEST 3

Boolean Algebra

Logic with TRUE and FALSE values

CONTEST 4

Graph Theory

Points, paths and connections

Every Elementary contest has 6 problems on that contest's topic. No programming on the test.

NorthSouth Foundation

JUNIOR DIVISION · TYPICALLY GRADES 7–9

Junior: three topics per contest, two problems each

CONTEST 1	Computer Number Systems	Recursive Functions	What Does This Program Do? Branching
CONTEST 2	Prefix / Infix / Postfix Notation	Bit-String Flicking	What Does This Program Do? Looping
CONTEST 3	Boolean Algebra	Data Structures	What Does This Program Do? Arrays
CONTEST 4	Graph Theory	Digital Electronics	What Does This Program Do? Strings

Each contest has 6 problems, two from each topic. Each sample contest has short problems and a programming problem.

NorthSouth Foundation

HOW WE PREPARE

The same simple rhythm before every contest

SESSION 1

Learn

Coach introduces the concept with guided examples

SESSION 2

Practice

Discussion, contest-style problems and a mock check

CONTEST SESSION

Compete

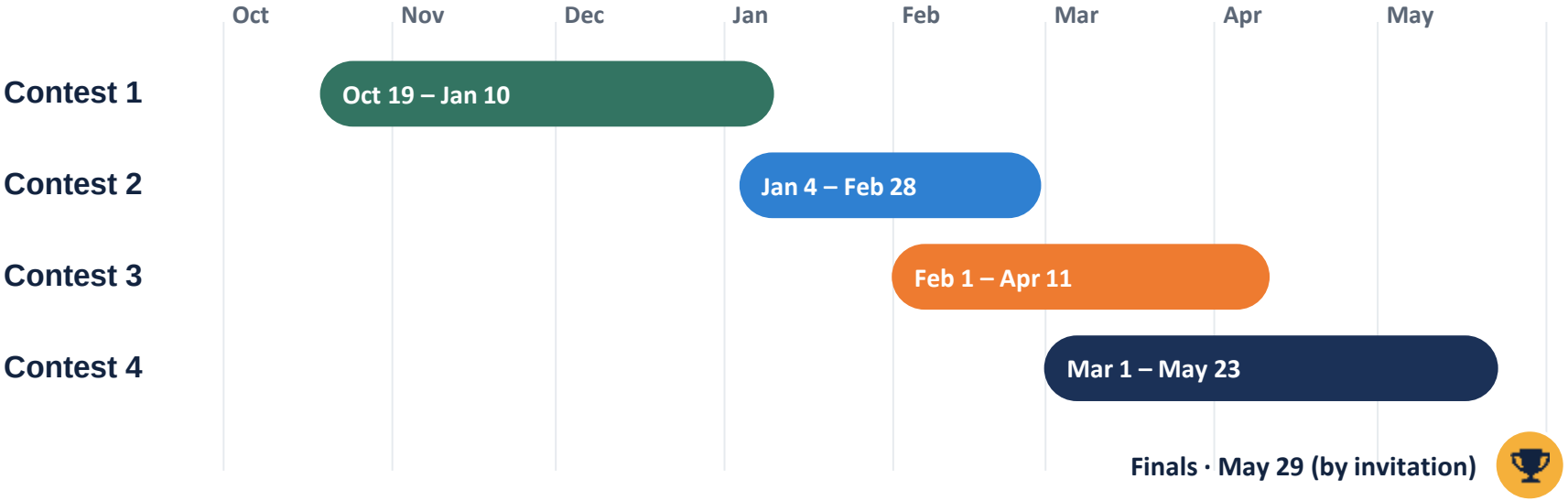
Monitored official ACSL short-answer contest

×4 Repeat for each contest · study materials between sessions · optional catch-up week when needed

NorthSouth Foundation

THE 2026–27 SEASON

Four contest windows, plenty of room to prepare



Official ACSL online windows. Each NorthSouth group picks its own test date inside the window.

NorthSouth Foundation

HOW TEAMS COME TOGETHER

You register. We build the team around your child.

NorthSouth National ACSL Team
Curriculum · coach kits · contest administration

Chapter team

Students near each other, with local support

We group by
grade · experience
location · availability

Regional virtual team

Students across chapters when local numbers are small

Youth coach High school / college mentor leads sessions

Parent coordinator Keeps schedules and families connected

NorthSouth Foundation

AFTER YOU REGISTER

Four simple steps from sign-up to first session

1. Register

northsouth.org/parent
$100 per student

2. Get onboarded

Google Classroom welcome and resources

3. Quick check-in

Readiness check + availability survey

4. Join your group

Meet your coach, set the schedule, start

The readiness check is not an entrance exam. It helps us support and group your child.

Saturday 7 PM on the site is a placeholder. Each group sets its own schedule.

NorthSouth Foundation

WHAT WE ASK OF FAMILIES

Your role is encouragement, not tutoring

WHAT HELPS YOUR CHILD SUCCEED

- **Show up** Join the group's preparation sessions
- **Practice** Try the posted problems between sessions
- **Compete** Complete all four official contests
- **Cheer the effort** Praise persistence and progress, not just scores

WHAT YOU DON'T NEED

- A computer science background
- A ready-made team
- Prior coding experience
- A fixed Saturday

NorthSouth Foundation

LET'S GET STARTED

Let's build thinkers.

GRADES 3–9 | $100 / STUDENT | BEGINNERS WELCOME

Register: northsouth.org/parent

0100 0101 1001 1000 1010 00
1100 1001 1001 0010 0100 01
0100 1011 0000 0011 1000 01
0000 1001 1111 1110 0000 11
0100 1001 0110 0110 0011 11

SCAN TO REGISTER

Want to help? Ask us about coordinating or coaching.

NorthSouth Foundation

YOUR QUESTIONS

Let’s talk about your child’s journey

Questions we often hear:

- Can a complete beginner join?
- Do we need our own team?
- Are Saturdays required?
- What about grade 6?
- How does Finals work?



Register: **northsouth.org/parent**

NorthSouth Foundation

BACKUP · FAQ

Questions families often ask

Can a complete beginner join?	Yes. No coding experience is needed; preparation starts from the basics.
Do we need to form our own team?	No. Register individually; NorthSouth coordinates groups.
Must we meet on Saturdays?	No. Meeting times are agreed within each group after registration.
Is the readiness check a selection test?	No. It's a placement and support tool, not an entrance exam.
My child is in grade 6. Elementary or Junior?	Placement follows official ACSL division rules; we'll guide you after registration.
Does registering guarantee Finals?	No. Finals invitations depend on ACSL contest performance.