

Virginia Secondary Mathematics Readiness Checklist

Independent VALYXIS instructional resource | Jonathan Dallas | October 20, 2026. Free to print for classroom and family use. Not a state-issued assessment or state-endorsed publication.

Scope

- secondary readiness through early Algebra 1. This short tool samples prerequisite skills
- it does not cover every Grade 7 standard, predict state-test performance, or determine placement by itself.
- Use this checklist with work samples and a short student conference. Mark each skill I = independent, P = with prompting, or N = not yet. Record the date and a concrete example
- leave unobserved skills blank.

What to collect

- one recent assignment
- the diagnostic in this pack
- a student explanation
- a teacher observation. Choose two priority skills rather than reteaching an entire earlier grade.

Official reference: https://www.doe.virginia.gov/. State adaptation: shared instructional core, local task, and state reference. Exact benchmark alignment and local implementation dates require educator review before standards-based reporting.

How to use the I / P / N ratings

Use these ratings to describe an observed skill, not a percentage score or a placement decision.

I - Independent

The learner demonstrates the skill accurately and explains their thinking without hints or prompts. Follow documented accommodations; accommodations alone do not change an I rating to P.

P - With prompting

The learner demonstrates the skill after a hint, guiding question, example, or visual model. Record the support that helped.

N - Not yet

The learner does not yet demonstrate the skill, even with support. Identify one focused next step and revisit the skill after instruction.

Not observed: Leave the rating blank if you have not observed the skill. Do not assign N solely because a question was skipped.

Record the date and concrete evidence, such as a work sample or student explanation. These letters describe current evidence and may change as the learner progresses.

Checklist | record observable evidence

Number sense

- Estimate results
- use order of operations
- explain why an answer is reasonable

Rating: I / P / N _____ Date: _____

Evidence: _____

Fractions

- Compare magnitudes
- use common units
- multiply and divide fractions with meaning

Rating: I / P / N _____ Date: _____

Evidence: _____

Decimals and percents

- Connect fractions, decimals and percents
- calculate discounts and percent change

Rating: I / P / N _____ Date: _____

Evidence: _____

Ratios

- Find unit rates
- scale quantities
- explain a constant of proportionality

Rating: I / P / N _____ Date: _____

Evidence: _____

Signed numbers

- Represent positive and negative quantities
- explain operations on a number line

Rating: I / P / N _____ Date: _____

Evidence: _____

Algebra readiness

- Use the distributive property
- simplify like terms
- solve and check equations

Rating: I / P / N _____ Date: _____

Evidence: _____

Geometry and data

- Use area and volume units
- distinguish height from side length
- interpret a mean

Rating: I / P / N _____ Date: _____

Evidence: _____

Early Algebra 1 extension

- Connect a table, graph and equation
- compare constant rates
- distinguish proportional from nonproportional models

Rating: I / P / N _____ Date: _____

Evidence: _____

Student reflection

A strategy that helps me is _____.

A question I want to ask is _____.

Planning decision: Preserve access to the current grade-level task. Add one focused prerequisite mini-lesson and one representation the learner can explain.

Virginia application and standards planning

Fictional Richmond community project: 3 packs of supplies cost $9.

- Find the unit price.
- Write a cost equation.
- Calculate the price of 8 packs.
- Explain why your equation is proportional.

Teacher key

- $3 per pack
- C = 3p
- 8 packs cost $24. The unit rate is constant and zero packs cost $0. These are invented classroom quantities, not local price data.

Official reference: https://www.doe.virginia.gov/. State adaptation: shared instructional core, local task, and state reference. Exact benchmark alignment and local implementation dates require educator review before standards-based reporting.

Local alignment worksheet

- School year ____
- district/course ____
- adopted standards version ____
- implementation date ____
- reviewer/date ____.

Map each domain

- Number ____
- Fractions ____
- Decimals ____
- Percent ____
- Ratios ____
- Integers ____
- Algebra ____
- Geometry/data ____

Record exact benchmark text, matching item, and any missing demand before claiming alignment.

Continue learning

- https://learnvalyxis.com/blog and https://learnvalyxis.com/ . Use these for additional explanation and practice
- this printable pack requires no account.