NOVEMBER 2026 / JANUARY 2027 PLANNING

Geometry atlas

Standards, score design, seasonal evidence, public stimuli, scored work and original transfer tasks.

Thu Jan 28 · 1:15 p.m. | Official January 2027 schedule

January forms	June forms	August forms	Printed slots
1	2	2	175

What the available design supports

35 questions and 80 raw credits. Congruence accounts for 27–34% of credits and similarity/right triangles/trigonometry for 29–37%. Coordinate geometry contributes 12–18%; modeling 8–15%; circles and measurement each 2–8%.

All five current final problems required proof. The first two used a geometric diagram. The three 2026 forms used coordinates. January required proving a trapezoid, then establishing parallelism and checking a length relationship.

One comparable January. Coordinate proof deserves rehearsal, along with a diagram-only route. The five problems cannot fix the theorem, figure or location of a future proof.

NYSED course guide / administration authority

A useful preparation decision

Select a recurring evidence demand, compare the official scoring criterion with a response, then change context for an independent check. The six new topic cards below broaden practice. Their contexts are original designs, and their exact future appearance has no estimated probability.

Topic	Original card
Coordinate proof	GEO-N01 Classifying a loading bay
Congruence and argument	GEO-N02 One observation cannot prove congruence
Similarity and trigonometry	GEO-N03 Two similar ramps
Circles and measurement	GEO-N04 Sector signs
Volume and modeling	GEO-N05 An open cylinder
Transformations	GEO-N06 Which transformations undo each other?

Blueprint and score contribution

Component	Range or maximum	Unit
Congruence	27.0 to 34.0	percent of test
Similarity, Right Triangles, and Trigonometry	29.0 to 37.0	percent of test
Circles	2.0 to 8.0	percent of test
Expressing Geometric Properties with Equations	12.0 to 18.0	percent of test
Geometric Measurement and Dimension	2.0 to 8.0	percent of test
Modeling with Geometry	8.0 to 15.0	percent of test
Selected response	48.0 to 48.0	credits
Short constructed response	14.0 to 14.0	credits
Extended constructed response	12.0 to 12.0	credits
Proof/modeling response	6.0 to 6.0	credits

Inherited NYSED guide snapshot. Consult the current linked guide before operational use. Ranges describe blueprint constraints. Distinct units and weighting rules must be retained.

Observed maximum-credit shares

Category	Forms	Mean %	Observed range %
G-C	5	5.0	5.0-5.0
G-CO	5	30.0	27.5-32.5
G-GMD	5	5.0	5.0-5.0
G-GPE	5	15.5	15.0-17.5
G-MG	5	12.5	10.0-15.0
G-SRT	5	32.0	30.0-35.0

One entry per domain and form. The unit is maximum raw credits. Form-specific category shares can be reproduced from the retained table.

Preserve the scoring interpretation

A local response criterion supports feedback about that task. A shortened exam or modified full-length assembly lacks the state form's validated conversion. Report separate evidence for independent and prompted work. Preserve item weights when describing coverage.

Code ledger and form prevalence

Each row reports forms with at least one valid matching slot. A count such as 1/2 is a form prevalence, not student accuracy. Codes are retained at their actual mapping granularity. ELA writing tasks carry broad mappings and are excluded from this frequency ledger.

Published code / label	Jan	June	Aug	All
G-C.A Circle theorems	1/1	2/2	2/2	5/5
G-C.B Arc lengths and sector areas	1/1	2/2	2/2	5/5
G-CO.A Transformations in the plane	1/1	2/2	2/2	5/5
G-CO.B Congruence via rigid motions	1/1	2/2	2/2	5/5
G-CO.C Prove geometric theorems	1/1	2/2	2/2	5/5
G-CO.D Geometric constructions	1/1	2/2	2/2	5/5
G-GMD.A Volume formulas and measurement	1/1	1/2	2/2	4/5
G-GMD.B Visualize relationships in 2D and 3D	1/1	2/2	2/2	5/5
G-GPE.A Loci and geometric equations	1/1	2/2	2/2	5/5
G-GPE.B Coordinate proofs	1/1	2/2	2/2	5/5
G-MG.A Model with geometry	1/1	2/2	2/2	5/5
G-SRT.A Similarity transformations	1/1	2/2	2/2	5/5
G-SRT.B Prove similarity theorems	1/1	2/2	2/2	5/5
G-SRT.C Right-triangle trigonometry	1/1	2/2	2/2	5/5
G-SRT.D Trigonometry in general triangles	1/1	2/2	2/2	5/5

Zero observed January forms provide no winter rate. Multiple codes can describe the same slot. Labels are short teaching descriptions, and official code wording and its boundary remain authoritative.

Topics, trend and stimulus hypotheses

Coordinate proof

G-GPE.B
January 1/1 | June 2/2 | August 2/2

Pooled planning probability 85.7% for a union of named codes in 5/5 forms. Nominal observed-prevalence interval 57%-100%. Union of named official codes on valid printed scoring slots in fully mapped target forms.

Design hypothesis coordinates using shop floor layout. Preserve the target relationship and change the setting.

Congruence and argument

G-CO.B; G-CO.C
January 1/1 | June 2/2 | August 2/2

Pooled planning probability 85.7% for a union of named codes in 5/5 forms. Nominal observed-prevalence interval 57%-100%. Union of named official codes on valid printed scoring slots in fully mapped target forms.

Design hypothesis counterexample using frame bracing. Preserve the target relationship and change the setting.

Similarity and trigonometry

G-SRT.A; G-SRT.C
January 1/1 | June 2/2 | August 2/2

Pooled planning probability 85.7% for a union of named codes in 5/5 forms. Nominal observed-prevalence interval 57%-100%. Union of named official codes on valid printed scoring slots in fully mapped target forms.

Design hypothesis scaled right triangles using roof pitch. Preserve the target relationship and change the setting.

Circles and measurement

G-C.B
January 1/1 | June 2/2 | August 2/2

Pooled planning probability 85.7% for a union of named codes in 5/5 forms. Nominal observed-prevalence interval 57%-100%. Union of named official codes on valid printed scoring slots in fully mapped target forms.

Design hypothesis arc and area using irrigation arc. Preserve the target relationship and change the setting.

Volume and modeling

G-GMD.A; G-MG.A
January 1/1 | June 2/2 | August 2/2

Pooled planning probability 85.7% for a union of named codes in 5/5 forms. Nominal observed-prevalence interval 57%-100%. Union of named official codes on valid printed scoring slots in fully mapped target forms.

Design hypothesis container decision using parts storage. Preserve the target relationship and change the setting.

Transformations

G-CO.A
January 1/1 | June 2/2 | August 2/2

Pooled planning probability 85.7% for a union of named codes in 5/5 forms. Nominal observed-prevalence interval 57%-100%. Union of named official codes on valid printed scoring slots in fully mapped target forms.

Design hypothesis coordinate rule using screen graphics. Preserve the target relationship and change the setting.

The contexts are possible practice stimuli. Their probabilities are unestimated. The quantitative estimates apply only to the named mapped-code event. Rows overlap and are not additive.

Observed public stimuli by topic

GEO_2026_08 classifying and excluding special quadrilaterals

math final written task geometric proof | coordinate proof with exclusions

Open public task

GEO_2026_06 parallelogram and isosceles triangle

math final written task geometric proof | coordinate proof from vertices

Open public task

GEO_2026_01 trapezoid and parallel segments

math final written task geometric proof | coordinate proof and length check

Open public task

GEO_2025_08 classifying a quadrilateral

math final written task geometric proof | synthetic parallelogram proof

Open public task

GEO_2025_06 intersecting segments in a quadrilateral

math final written task geometric proof | synthetic proof of a product relation

Open public task

A source-set overlap with a code is broader than a one-to-one match between the format and the entire expectation. The full CSV retains all observed sets and joins.

Released item exemplars and mappings

Coordinate proof / GEO-N01

Practice evidence AB and CD have slope 0; AD and BC have slope 2. Both pairs of opposite sides are parallel.

GEO_2026_08_35 public question

Official published mapping

Verification route live map row match

Congruence and argument / GEO-N02

Practice evidence No. The included angles differ, so SAS does not apply and these triangles have different included angles.

GEO_2026_08_33 public question

Official published mapping

Verification route live map row match

Similarity and trigonometry / GEO-N03

Practice evidence The scale factor is 1.5, so B runs 7.2 m.

GEO_2026_08_34 public question

Official published mapping

Verification route live map row match

Circles and measurement / GEO-N04

Practice evidence Arc lengths are pi cm and 3pi cm.

GEO_2026_08_31 public question

Official published mapping

Verification route live map row match

Volume and modeling / GEO-N05

Practice evidence Both volumes are 72pi cubic cm.

GEO_2026_08_32 public question

Official published mapping

Verification route live map row match

Transformations / GEO-N06

Practice evidence The composite is (x+4,-y+2).

GEO_2026_08_13 public question

Official published mapping

Verification route live map row match

The connection is a shared published code. Compare the complete tasks before treating them as equivalent practice.

Finish a coordinate proof

GEO_2026_01 Q35 | Published result 5/6

Observed evidence

The student calculated slopes, including work on the continuation page, but omitted the conclusion establishing the trapezoid.

Possible interpretation

The reasoning may be implicit. A slope calculation alone does not show whether the geometric definition is understood.

Diagnostic prompt

Which sides do the slopes tell you are parallel, and which definition does that establish here?

Teaching move

Annotate each computation with its geometric consequence. Finish with the classification warranted by those facts.

Public task

Sample or criterion

Commentary

Higher comparison anchor

Official mapping

This is a selected released example or criterion. Local student work was not supplied. Preserve alternate explanations until a new response distinguishes them.

Match a reason to a proof step

GEO_2026_08 Q33 | Published result 3/4

Observed evidence

The scorer isolated an incorrect reason at step nine. This is a narrower problem than an entirely invalid proof.

Possible interpretation

The student may know the relationship but choose a theorem whose hypotheses have not been established.

Diagnostic prompt

What must already be true to use the reason you wrote at this line?

Teaching move

Work backward from a proof statement to its prerequisites. Underline where each prerequisite was established.

Public task

Sample or criterion

Commentary

Higher comparison anchor

Official mapping

This is a selected released example or criterion. Local student work was not supplied. Preserve alternate explanations until a new response distinguishes them.

Support each classification separately

GEO_2026_08 Q35 | Published result 4/6

Observed evidence

The parallelogram and nonrectangle conclusions were incomplete. The same paper contains evidence of progress toward the larger proof.

Possible interpretation

The writer may treat an initial classification as sufficient for every later claim.

Diagnostic prompt

What fact would exclude a rectangle after you have established a parallelogram?

Teaching move

Use one claim-evidence-warrant line per classification. Change the coordinates and ask which warrant still holds.

Public task

Sample or criterion

Commentary

Higher comparison anchor

Official mapping

This is a selected released example or criterion. Local student work was not supplied. Preserve alternate explanations until a new response distinguishes them.

Six original contexts and the prep route

Card	Target relationship	Transfer condition
GEO-N01 Classifying a loading bay	Use slopes to prove a parallelogram.	Move C and D two units left and analyze which conclusions change.
GEO-N02 One observation cannot prove congruence	Does the supplied information prove congruence? Explain.	Use a third equal side instead of the included angle and explain the different criterion.
GEO-N03 Two similar ramps	Find B's horizontal run.	Compare a third ramp rising 0.9 m over 6 m using its ratio instead of a drawing.
GEO-N04 Sector signs	Compute both arc lengths exactly.	Hold radius fixed and double the sector angle. Compare both scaling effects.
GEO-N05 An open cylinder	Show that the capacities match.	Add a lid to both and recalculate the preferred design.
GEO-N06 Which transformations undo each other?	Write the composite coordinate rule.	Replace reflection with a 180-degree rotation and compare the two orders.

Retained three-week Studio sequence

Week 1 session 1 A diagonal that proves something

Week 1 session 2 From coordinates to a proof

Week 2 session 3 Why the shadows tell us height

Week 2 session 4 Turn an arc into a length

Week 3 session 5 Which measures scale?

Week 3 session 6 Prove or disprove a classification

The practice folder contains the prior standalone original exam, Form B rehearsal insert and directions, exam guide, six-session student prep and worked responses. Separate new stimulus student and teacher books add these six contexts. Use the full-length public booklet links in the assembly map.

Connections and department decisions

GEO-N01 Classifying a loading bay

Treating one supported classification as proof of every classification. This is a diagnostic hypothesis. Ask the learner to explain the step before selecting a response.

Related reasoning ELA-N01 The repaired radio, ELA-N03 Who counts as a reader?

GEO-N02 One observation cannot prove congruence

Using any two equal sides and any angle as SAS. This is a diagnostic hypothesis. Ask the learner to explain the step before selecting a response.

Related reasoning ELA-N01 The repaired radio, ELA-N03 Who counts as a reader?

GEO-N03 Two similar ramps

Using a scale factor for length as a change in angle. This is a diagnostic hypothesis. Ask the learner to explain the step before selecting a response.

Related reasoning ALG1-N04 Same center, different repair times, ALG1-N06 Measuring foam panels

GEO-N04 Sector signs

Scaling area by the same factor as a radius. This is a diagnostic hypothesis. Ask the learner to explain the step before selecting a response.

Related reasoning ALG1-N04 Same center, different repair times, ALG1-N06 Measuring foam panels

GEO-N05 An open cylinder

Inferring equal surface area from equal volume. This is a diagnostic hypothesis. Ask the learner to explain the step before selecting a response.

Related reasoning ALG1-N01 Charging the battery cart, ALG1-N03 Two receipt checks

GEO-N06 Which transformations undo each other?

Treating reflection as changing both coordinate signs. This is a diagnostic hypothesis. Ask the learner to explain the step before selecting a response.

Related reasoning ALG1-N02 Raised garden arch, ALG2-N02 A platform that repeats

Use the anonymous calibration record to preserve the initial judgments, criterion evidence, an instructional move and a new independent response. Review the same reasoning in a changed context and record prior exposure.