9th-12th Grade Math

Rational and Irrational Numbers	
I have read the above standards and think they are appropriate as written.	
Number	Percent
47	78.33%
I have read the above standards and offer the following comments.	
Number	Percent
13	21.67%

This should be taught in Algebra 2

I understand the wording in the example part of HSN.RN.A.1 but I think after the "because", it gets a bit confusing.

HSN.RN.A.1 is very wordy and hard to understand. I had to look at the example to clearly understand. HSN.RN.B3 is fine the way it is written.

If the language used in the writing of the standard must be so "dense," please provide more examples of what is expected within the standard.

I would revise and synthesize the first standard.

Providing the example on RN.A.1 was very useful for teachers, parents, and students. I feel that you should provide examples when a standard is wordy or vague.

B3 Why "explain"? They are what they are. It seems that the word explain was put there to make it sound like it was a higher order thinking skill.

Standard HSN.RN.A.1 is too muddled at the beginning. Why does it not say something like "Explain, using the definition of rational exponents and properties of integers, that notation for radicals can be rewritten in terms of exponents."

I know this is the 9-12 standard, but our algebra I standards do not have powers of monomials. It is in 8th grade. I know it was a gap, but I had to teach that skill before my algebra I students were ready for quadratics and polynomials. It might be good for that skill to also be in Algebra I.

The writing of standards is like the writing of a lawyer. English plain and simple is best for me.

HSN.RN.B.3 is not specific enough. Is this simply an explanation of what happens, or should it also include operations with expressions?

9ᵗʰ-12ᵗʰ Grade Math

If standard RN.A.1 was written in understandable terms, it wouldn't need the "For example." Is this "For example" all that the standard is asking.

Specify in what grade or subject the standards should be taught.

Quantitative Reasoning

I have read the above standards and think they are appropriate as written.

Number	Percent
53	88.33%

I have read the above standards and offer the following comments.

Number	Percent
7	11.67%

Too vague

The second tow standards are quite broad and open to subjectivity (teacher/district/etc.)

QA.1 Use and interpret units consistently in formulas; understand and choose units to guide the solution of multi-step problems and interpret the scale and origin of graph and data displays.

Examples of these would be nice. A3 can be choosing inches instead of miles or something much more complex from the sounds of it.

HSN.Q.A.2 - Too open ended - what is descriptive modeling. HSN.Q.A.3 - To whose level of accuracy? Different for Statistics, AP Calculus, and Science courses. Our school expects the same across the curriculum.

All three standards for quantitative reasoning are extremely vague. what is a level of accuracy? Does it change by grade level?

Specify in what grade or subject the standards should be taught.

Complex Numbers

I have read the above standards and think they are appropriate as written.

Number	Percent
51	85.00%

I have read the above standards and offer the following comments.

Number	Percent
9	15.00%

This needs to be taught in Algebra 2

These are a bit vague.

9ᵗʰ-12ᵗʰ Grade Math

In standard HSN. CN.A.3, I did not understand what a moduli is (until I looked it up in a trigonometry textbook) and why it is applicable to Algebra 2.

Are we supposed to find moduli in Algebra II?

CN.A.1 ...has the form a + bi with "a" and "b" being real numbers.

Standard HSN.CN.A.1 seems to me that it should read "where a and b are real."

Why not give an example of your expectations for CNA.3

HSN.CN.A.3: Moduli?!

Specify in what grade or subject the standards should be taught.

Complex Numbers on the Complex Plane

I have read the above standards and think they are appropriate as written.

Number	Percent
48	80.00%

I have read the above standards and offer the following comments.

Number	Percent
12	20.00%

This should be taught in math higher than Algebra 2

This is way above anything I teach.

I do not know what polar form is. Can we have more explanation or an example in the standard?

In what course is this content taught? It seems way above algebra II.

.

These standards are not among those that our grade level teaches.

B5 shouldn't that be a square instead of cube?

Terrible standard. Teachers are not all really good at polar or even just good.. Due to that, this standard may be treated as a plus and not taught to algebra2 or higher mathematics.

9th-12th Grade Math

HSN.CN.B.5 and HSN.CN.B.6 - too high a level for high school students; never did any of these type problems until masters work.

I feel that the complex number system is interesting and useful for some students, but most student will never use this information and our time could be better spent in other areas.

The average math teacher isn't going to understand what any of the above standards are asking him/her to teach. If the teacher doesn't understand and can't teach it, how does this help the students?

Specify in what grade or subject the standards should be taught.

Complex Numbers in Polynomial Identities and Equations

I have read the above standards and think they are appropriate as written.

Number	Percent
55	91.67%

I have read the above standards and offer the following comments.

Number	Percent
5	8.33%

This needs to be covered in Algebra 2.

C.7 Solve quadratic equations with real and complex solutions.

CNC9. Where is example. You have one for CNC8.

Knowledge of the complex number system should be limited to students who plan to study much more math. Students who plan to go not further than Algebra II could use the time on other areas.

Specify in what grade or subject the standards should be taught.

Model Vectors

I have read the above standards and think they are appropriate as written.

Number	Percent
50	83.33%

I have read the above standards and offer the following comments.

Number	Percent
10	16.67%

This needs to be covered in math higher than Algebra 2.

I would like an example. Some of these standards are vague and the wording is difficult to understand.

Isn't this physics?

Too much for Algebra II.

I don't get into vectors; so, unsure if it is appropriately written

.

These standards are not among those that our grade level teaches.

High school math books don't support vectors as well as the standards want. Vectors seems to be better understood by my physics students that those who do not take physics.

Vectors are covered in physics for the few students that will ever use them. Stop the overlap.

Specify in what grade or subject the standards should be taught.

Perform Operations on Vectors

I have read the above standards and think they are appropriate as written.

Number	Percent
53	88.33%

I have read the above standards and offer the following comments.

Number	Percent
7	11.67%

This should be covered in a math higher than Algebra 2.

Above what I teach, so I have no comment.

I don't get into vectors; so, unsure if it is appropriately written

.

These standards are not among those that our grade level teaches.

Vectors are covered in physics for the few students that will ever use them. Stop the overlap. I have a degree in math. I learned very little about vectors in high school or college. I know all most no one who uses them.

Specify in what grade or subject the standards should be taught.

9th-12th Grade Math

Matrices	
I have read the above standards and think they are appropriate as written.	
Number	Percent
52	86.67%
I have read the above standards and offer the following comments.	
Number	Percent
8	13.33%

Keep this in Algebra 2.

Would like examples

HSN.VM.C.12 is confusing. I need an example.

Would like an example for HSN.VM.C.12

Any instance where a standard uses the verb "understand" is not effectively communicating the objective. Do you want the educator to "understand", or do you want them to "show", "model", or "explain"?

HSN VM C8. Possibly include with/without technology.

HSN.VM.C.12 - What is the point, considering the other ways transformations have been taught?

Specify in what grade or subject the standards should be taught.

Interpret Structure of Expressions	
I have read the above standards and think they are appropriate as written.	
Number	Percent
57	95.00%
I have read the above standards and offer the following comments.	
Number	Percent
3	5.00%

This needs to be in Algebra 1.

Aren't there better examples that could be used for these?

Specify in what grade or subject the standards should be taught.

9th-12th Grade Math

Expressions in Equivalent Forms

I have read the above standards and think they are appropriate as written.

Number	Percent
57	95.00%

I have read the above standards and offer the following comments.

Number	Percent
3	5.00%

This needs to be in Algebra 1 and Algebra 2.

SSE.B.4 Not many students are going to be able to derive a formula.

Specify in what grade or subject the standards should be taught.

Operations on Polynomials

I have read the above standards and think they are appropriate as written.

Number	Percent
55	91.67%

I have read the above standards and offer the following comments.

Number	Percent
5	8.33%

This should be in Algebra 2.

Understand that polynomials are closed under the operations of additions, subtractions, and multiplication.

I think the wording on this is a little confusing. I would reword it a little differently.

When have we talked about be closed under an operation? Middle school? Elementary School?

Specify in what grade or subject the standards should be taught.

Relationship Between Zeros and Factors of Polynomials

I have read the above standards and think they are appropriate as written.

Number	Percent
58	96.67%

I have read the above standards and offer the following comments.

Number	Percent
2	3.33%

This needs to be in Algebra 2.

9th-12th Grade Math

Specify in what grade or subject the standards should be taught.	

Polynomial Identities

I have read the above standards and think they are appropriate as written.

Number	Percent
55	91.67%

I have read the above standards and offer the following comments.

Number	Percent
5	8.33%

This belongs in Algebra 2.

Where in high school mathematics are the words and explanation of polynomial indentities?

HSA.APR.C.4 - This does not seem to blend with Algebra II. Pythagorean triples are a geometry concept. Be more specific, please.

The example for APR.C.4 doesn't fit the stem. The stem is talking about describing, and the example is looking at generating. APR.C.5 Does this refer only to Pascal's Triangle or are their other examples to be included in instruction?

Specify in what grade or subject the standards should be taught.

Rational Expressions

I have read the above standards and think they are appropriate as written.

Number	Percent
55	91.67%

I have read the above standards and offer the following comments.

Number	Percent
5	8.33%

This needs to be in Algebra 2.

Both are wordy.

These standards are not among those that our grade level teaches.

HSA.APR.D.6 - computer algebra system?

Specify in what grade or subject the standards should be taught.

9th-12th Grade Math

Create Equations

I have read the above standards and think they are appropriate as written.

Number	Percent
58	96.67%

I have read the above standards and offer the following comments.

Number	Percent
2	3.33%

This should be in Algebra 1.

Specify in what grade or subject the standards should be taught.

Reasoning

I have read the above standards and think they are appropriate as written.

Number	Percent
58	96.67%

I have read the above standards and offer the following comments.

Number	Percent
2	3.33%

This should be in Algebra 1. Except for HSA.REI.A.2, should be in Algebra 2.

Specify in what grade or subject the standards should be taught.

Solve Equations and Inequalities

I have read the above standards and think they are appropriate as written.

Number	Percent
57	95.00%

I have read the above standards and offer the following comments.

Number	Percent
3	5.00%

This should be in Algebra 1

CED.A.4 - Add the example from this one to REI.B.3. Then delete REI.B.3.

Specify in what grade or subject the standards should be taught.

Solve Systems of Equations

I have read the above standards and think they are appropriate as written.

Number	Percent
56	93.33%

9th-12th Grade Math

I have read the above standards and offer the following comments.	
Number	Percent
4	6.67%

C.5 and C.6 need to be in Algebra 1. C.6, C.7, C.8 and C.9 should be in Algebra 2.

Don't quite understand HSA.REI.C8. Providing and example would be beneficial.

HSA.REI. C.5 - Prove is too high of a conceptual level of Algebra I students.

Specify in what grade or subject the standards should be taught.

Solve Equations and Inequalities Graphically

I have read the above standards and think they are appropriate as written.	
Number	Percent
58	96.67%

I have read the above standards and offer the following comments.	
Number	Percent
2	3.33%

This should be in Algebra 1

Specify in what grade or subject the standards should be taught.

Functions

I have read the above standards and think they are appropriate as written.	
Number	Percent
57	95.00%

I have read the above standards and offer the following comments.	
Number	Percent
3	5.00%

This should be covered in Algebra 1.

In HSF.IFA.1 this is definition of a function and should be worded to reflect that. Understand that a function is defined as a set that maps exactly one element of the domain with exactly one element of the range.

Specify in what grade or subject the standards should be taught.

Interpret Functions

I have read the above standards and think they are appropriate as written.	
Number	Percent
57	95.00%

9th-12th Grade Math

I have read the above standards and offer the following comments.

Number	Percent
3	5.00%

These are Algebra 1 skills.

Thank you for explicitly defining key features of a graph in standard HSF.IF.B.4. Not just in HSF.IF.B.6, but throughout theses standards average rate of change is never referred to as slope. For years Arkansas teachers (especially at the calculus/pre-calculus level) have been relating the concepts of "slope" and "average rate of change" and I think that should be reflected somewhere in the wording of the standards.

Specify in what grade or subject the standards should be taught.

Analyze Functions

I have read the above standards and think they are appropriate as written.

Number	Percent
55	91.67%

I have read the above standards and offer the following comments.

Number	Percent
5	8.33%

These are Algebra 2 skills.

C.8.A Giving a context would be helpful.

In polynomial functions I would add the concepts of even and odd functions especially as it relates to symmetry. Also I would add identifying relative min and relative max from a graph.

Piecewise linear is fine at the Algebra I level. However, with other functions, it needs to be at the Algebra II level.

Specify in what grade or subject the standards should be taught.

Build Functions Modeling Relationship Between Two Quantities

I have read the above standards and think they are appropriate as written.

Number	Percent
57	95.00%

I have read the above standards and offer the following comments.

Number	Percent
3	5.00%

These need to be covered in Algebra 2.

These standards are not among those that our grade level teaches.

Specify in what grade or subject the standards should be taught.

Build Functions from Existing Functions

I have read the above standards and think they are appropriate as written.

Number	Percent
55	91.67%

I have read the above standards and offer the following comments.

Number	Percent
5	8.33%

These need to be taught in Algebra 2.

In standard HSF.BF.B.3, the concept of TRANSFORMATIONS is discussed, but the word transformation in not used...why?

Not sure how to change it, but B3 is ugly!

HSF.BF.B.4.D - invertible? non-invertible?

Specify in what grade or subject the standards should be taught.

Compare Models and Solve Problems

I have read the above standards and think they are appropriate as written.

Number	Percent
56	93.33%

I have read the above standards and offer the following comments.

Number	Percent
4	6.67%

These are Algebra 1 skills.

Example for base 2

Example for base 2

Specify in what grade or subject the standards should be taught.

9th-12th Grade Math

Interpret Expressions for Functions

I have read the above standards and think they are appropriate as written.

Number	Percent
56	93.33%

I have read the above standards and offer the following comments.

Number	Percent
4	6.67%

This is an Algebra 1 skill

Too broad. Which parameters?

The meaning of this standard would be more clear if you would include an example.

Specify in what grade or subject the standards should be taught.

Unit Circle

I have read the above standards and think they are appropriate as written.

Number	Percent
56	93.33%

I have read the above standards and offer the following comments.

Number	Percent
4	6.67%

This should be covered in math higher than Algebra 2.

These standards are not among those that our grade level teaches.

These standards should be integrated into the math classes, not separated out into our current system of Algebra 1, Geometry, Algebra 2.
We are the only nation that separated math and it doesn't make sense to do this. Geometry and Algebra should be learned hand in hand, not compartmentalized. We need to have an integrated system of mathematics for the high schools.

Specify in what grade or subject the standards should be taught.

Periodic Phenomena

I have read the above standards and think they are appropriate as written.

Number	Percent
57	95.00%

I have read the above standards and offer the following comments.

Number	Percent
3	5.00%

9th-12th Grade Math

This should be covered in math higher than Algebra 2

These standards are not among those that our grade level teaches.

Specify in what grade or subject the standards should be taught.

Trigonometric Identities

I have read the above standards and think they are appropriate as written.

Number	Percent
55	91.67%

I have read the above standards and offer the following comments.

Number	Percent
5	8.33%

This should be covered in math higher than Algebra 2.

Worried about these coming into geometry for lower level kids. They don't have the foundational algebra skills to work through these without going through algebra 2 and most of them won't. For good math students they're great.

Why in Algebra II now?

The average student will be unable to prove either of the above.

Specify in what grade or subject the standards should be taught.

Transformations in the Plane

I have read the above standards and think they are appropriate as written.

Number	Percent
57	95.00%

I have read the above standards and offer the following comments.

Number	Percent
3	5.00%

This needs to stay in Geometry

The use of computers have caused us to place far too much emphasis on transformations.

Specify in what grade or subject the standards should be taught.

9th-12th Grade Math

Congruence

I have read the above standards and think they are appropriate as written.

Number	Percent
46	93.88%

I have read the above standards and offer the following comments.

Number	Percent
3	6.12%

Why do we need to show congruence with rigid motions and transformations?

I would like to see us open the discussion for going integrated. This would allow geometry to be an application each year instead of a disconnected subject and lighten the load of content that is currently placed on algebra 1 and 2.

Specify in what grade or subject the standards should be taught.

Geometric Theorems

I have read the above standards and think they are appropriate as written.

Number	Percent
46	93.88%

I have read the above standards and offer the following comments.

Number	Percent
3	6.12%

This quantity of proofs is unnecessary for students who are not college bound.

Proofs should be extra, only for pre-ap classes. Not enough time in regular classes

Specify in what grade or subject the standards should be taught.

Geometric Constructions

I have read the above standards and think they are appropriate as written.

Number	Percent
48	97.96%

I have read the above standards and offer the following comments.

Number	Percent
1	2.04%

Specify in what grade or subject the standards should be taught.

9th-12th Grade Math

Similarity Transformations

I have read the above standards and think they are appropriate as written.

Number	Percent
46	93.88%

I have read the above standards and offer the following comments.

Number	Percent
3	6.12%

Eliminate the dilation of a line in A.1A and B

These standards should be integrated into the other high school math classes instead of being separated into Algebra and Geometry classes. When math is taught holistically, students can make more powerful connections.

Specify in what grade or subject the standards should be taught.

Prove Theorems Involving Similarity

I have read the above standards and think they are appropriate as written.

Number	Percent
46	93.88%

I have read the above standards and offer the following comments.

Number	Percent
3	6.12%

Triangle similarity is a very narrow way to look at proving the Pythagorean Theorem. Area proofs make more sense to students.

B.4 Solve problems using a line parallel to one side of a triangle that divides the other sides proportionally, and conversely.

Specify in what grade or subject the standards should be taught.

Trigonometric Ratios

I have read the above standards and think they are appropriate as written.

Number	Percent
47	95.92%

I have read the above standards and offer the following comments.

Number	Percent
2	4.08%

HSG.SRT.C.6 Does everyone realize this is taking trig to the unit circle?

Specify in what grade or subject the standards should be taught.

9th-12th Grade Math

Apply Trigonometry to General Triangles

I have read the above standards and think they are appropriate as written.	
Number	Percent
43	87.76%

I have read the above standards and offer the following comments.	
Number	Percent
6	12.24%

This concept is too difficult for Sophomores to understand.

D.10 What types of problems?

Keep these extra

Again the lower level geometry kids may not have the algebra skills to handle this past the point of "here is more math that I'm never going to use!" They are good extensions, but I'm not convinced they should be standards.

The average student will not be able to derive or prove the above standards.

Specify in what grade or subject the standards should be taught.

Theorems about Circles

I have read the above standards and think they are appropriate as written.	
Number	Percent
48	97.96%

I have read the above standards and offer the following comments.	
Number	Percent
1	2.04%

Specify in what grade or subject the standards should be taught.

Arc Lengths and Areas of Sectors

I have read the above standards and think they are appropriate as written.	
Number	Percent
47	95.92%

I have read the above standards and offer the following comments.	
Number	Percent
2	4.08%

Radian measure does not need to be in Geometry, and it is set up odd on the reference sheet.

9ᵗʰ-12ᵗʰ Grade Math

Specify in what grade or subject the standards should be taught.	
Conic Sections	
I have read the above standards and think they are appropriate as written.	
Number	Percent
43	87.76%
I have read the above standards and offer the following comments.	
Number	Percent
6	12.24%

This is an Algebra 2 concept.

I do not like the way these topics have been split between three courses.

These standards are not among those that our grade level teaches.

does not need to be in Geometry

Are conics taught in College Algebra and College Trig? These are not skills that the average student needs. The above average student can easily learn about these in higher math courses.

Specify in what grade or subject the standards should be taught.

Coordinates	
I have read the above standards and think they are appropriate as written.	
Number	Percent
47	95.92%
I have read the above standards and offer the following comments.	
Number	Percent
2	4.08%

Is all of this necessary for the ACT Aspire and ACT?

Specify in what grade or subject the standards should be taught.

Volume Formulas	
I have read the above standards and think they are appropriate as written.	
Number	Percent
45	91.84%
I have read the above standards and offer the following comments.	
Number	Percent

4	8.16%

I think that it is difficult to learn volume without doing area at the same time. Also, it seems more logical to have less proof in this unit and more practical application, particularly for non-college bound students.

Where is Surface area?

HSG.Gmd.A.1 - needs to be more specific

Specify in what grade or subject the standards should be taught.

Two-Dimensional and Three-Dimensional Objects	
I have read the above standards and think they are appropriate as written.	
Number	Percent
47	95.92%
I have read the above standards and offer the following comments.	
Number	Percent
2	4.08%

7.G.B.4 should be attached to HSG.GMD.B.4 It is not related to any other standards in the 6-8 standards.

Specify in what grade or subject the standards should be taught.

Geometric Modeling	
I have read the above standards and think they are appropriate as written.	
Number	Percent
47	95.92%
I have read the above standards and offer the following comments.	
Number	Percent
2	4.08%

Does not need to be included

Specify in what grade or subject the standards should be taught.

Data	
I have read the above standards and think they are appropriate as written.	
Number	Percent
43	87.76%
I have read the above standards and offer the following comments.	
Number	Percent
6	12.24%

9th-12th Grade Math

This is an Algebra 1 concept

Is this really necessary in Algebra II?

These standards are not among those that our grade level teaches.

Not Geometry in algebra II or algebra I

Many math teachers do not understand some of the statistical terminology if they have not been involved in AP Statistics or other training. There needs to be more training available for teachers to understand these standards.

Specify in what grade or subject the standards should be taught.

Data on Two Categorical and Quantitative Variables

I have read the above standards and think they are appropriate as written.

Number	Percent
44	89.80%

I have read the above standards and offer the following comments.

Number	Percent
5	10.20%

This is an Algebra 1 concept

Are residual plots necessary for Algebra II?

Not Geometry, algebra

HSS.ID.B.5 - More explanation; we have a disagreement on what this means. HSS.ID.B.6.B - We are not sure that all teachers know and understand about residuals. HSS.ID.B.6.C - We are not sure that all teachers know the difference between correlation and association.

Specify in what grade or subject the standards should be taught.

Linear Models

I have read the above standards and think they are appropriate as written.

Number	Percent
45	91.84%

I have read the above standards and offer the following comments.

Number	Percent
4	8.16%

9th-12th Grade Math

Algebra 1

C.8 and 9 is not Geometry but Algebra

HSS.ID.C.9 - There has been a lot of change involving statistics. Are all teachers sure of the difference?

Specify in what grade or subject the standards should be taught.

Random Processes

I have read the above standards and think they are appropriate as written.

Number	Percent
44	89.80%

I have read the above standards and offer the following comments.

Number	Percent
5	10.20%

Algebra 1

I don't teach Stats; so unsure if they are appropriately written.

These standards are not among those that our grade level teaches.

HSS.IC.A.1 - How in depth should the inferences go, i.e. hypothesis testing? HSS.IC.A.2 - Does everyone truly understand random?

Specify in what grade or subject the standards should be taught.

Inferences and Conclusions

I have read the above standards and think they are appropriate as written.

Number	Percent
42	85.71%

I have read the above standards and offer the following comments.

Number	Percent
7	14.29%

This belongs in a Stats course

I think there is too much statistics in Algebra II.

HSS.IC.B.6 - include types of reports or an example

These standards are not among those that our grade level teaches.

Nice, but lots to do in Algebra II

Again, teachers need training on statistics and its terminology.

Specify in what grade or subject the standards should be taught.

Independence and Conditional Probability

I have read the above standards and think they are appropriate as written.

Number	Percent
43	87.76%

I have read the above standards and offer the following comments.

Number	Percent
6	12.24%

Algebra 1

Confusing

These standards are not among those that our grade level teaches.

Nice but lots to do in Algebra II

The above statistics standards fit an AP Statistics course rather than the statistics that is taught in Algebra II.

Specify in what grade or subject the standards should be taught.

Rules of Probability and Compound Events

I have read the above standards and think they are appropriate as written.

Number	Percent
44	89.80%

I have read the above standards and offer the following comments.

Number	Percent
5	10.20%

Algebra 1

B.9 What types of problems?

These standards are not among those that our grade level teaches.

9th-12th Grade Math

Nice but lot to do in Algebra II

Specify in what grade or subject the standards should be taught.

Expected Values	
I have read the above standards and think they are appropriate as written.	
Number	Percent
44	89.80%
I have read the above standards and offer the following comments.	
Number	Percent
5	10.20%

Algebra 1

Too much

I don't teach Stats; so unsure if they are appropriately written.

These standards are not among those that our grade level teaches.

Specify in what grade or subject the standards should be taught.

Use Probability	
I have read the above standards and think they are appropriate as written.	
Number	Percent
45	91.84%
I have read the above standards and offer the following comments.	
Number	Percent
4	8.16%

Algebra 1

Too much

These standards are not among those that our grade level teaches.

Specify in what grade or subject the standards should be taught.