

SheetFormR Math Mode — Grade 11

Algebra 2 | CCSS Domains: N-CN | A-SSE | A-APR | A-REI | F-IF | F-BF | F-TF | S-ID

How to use:

Step 1: Add a column named Equation (or Math, Formula, EQ, LaTeX) to your spreadsheet.
 Step 2: Type your equation using the notation below. Step 3: Enable Render Math Equations in Build Options.
 Step 4: Build your form — equations appear as crisp, professional images! No codes needed.

Notation: * = multiply ^ = exponent / = fraction sqrt() = sq root pi = pi _ = subscript |x| = abs >= <= = ineq.

Extended: _ = subscript (log_2 = log base 2) |x| = absolute value sin() cos() tan() = trig theta = th

Quick Start: You type: $\log_2(8) = 3$ -> *Students see: a rendered image: log base 2 of 8 = 3*

Polynomials (A-SSE, A-APR)

Standard	What You Want	Type in Equation Column	Students See (rendered image)
A-SSE.2	Factor difference sq.	$x^2 - 9 = (x+3)(x-3)$	$(x+3)(x-3)$
A-SSE.2	Factor perfect sq.	$x^2 + 6x + 9 = (x+3)^2$	$(x+3)$ squared
A-APR.2	Remainder theorem	$f(x)/(x - 2)$	$f(x)$ over $(x - 2)$
A-APR.3	Find zeros	$x^3 - 6x^2 + 11x - 6$	cubic polynomial
A-APR.4	Sum of cubes	$a^3 + b^3$	a cubed + b cubed
A-APR.4	Difference of cubes	$a^3 - b^3$	a cubed - b cubed
A-APR.6	Polynomial division	$(x^3 - 1)/(x - 1)$	$(x$ cubed - 1) $(x - 1)$

Rational Expressions & Equations (A-APR, A-REI)

Standard	What You Want	Type in Equation Column	Students See (rendered image)
A-APR.7	Simplify rational	$(x^2 - 1)/(x + 1)$	$(x$ sq - 1) over $(x+1)$
A-APR.7	Add rationals	$1/x + 1/(x+1)$	$1/x + 1/(x+1)$
A-REI.2	Radical equation	$\sqrt{x + 3} = 5$	$\sqrt{x + 3} = 5$
A-REI.2	Rational equation	$1/x + 1/(x-1) = 3$	$1/x + 1/(x-1) = 3$

Complex Numbers (N-CN)

Standard	What You Want	Type in Equation Column	Students See (rendered image)
N-CN.1	Imaginary unit	$i^2 = -1$	i squared = -1
N-CN.2	Complex arithmetic	$(3 + 2i) + (1 - 4i)$	$(3+2i) + (1-4i)$
N-CN.7	Complex solutions	$x^2 + 4 = 0$	x sq + 4 = 0

Exponential & Logarithmic Functions (F-IF, F-BF, F-LE)

Standard	What You Want	Type in Equation Column	Students See (rendered image)
F-IF.7e	Exponential graph	$f(x) = 2^x$	$f(x) = 2$ to the x
F-LE.4	Logarithm intro	$\log_2(8) = 3$	log base 2 of 8 = 3
F-LE.4	Natural logarithm	$\ln(e^x) = x$	$\ln(e$ to $x) = x$
F-BF.5	Inverse: log and exp	$y = e^x$	$y = e$ to the x
A-SSE.3c	Compound interest	$A = P(1 + r/n)^{n*t}$	compound interest
F-LE.1c	Continuous growth	$A = P * e^{(r*t)}$	$A = P$ x e to (rt)

Radical Functions & Rational Exponents (N-RN, F-IF)

Standard	What You Want	Type in Equation Column	Students See (rendered image)
N-RN.1	Rational exponent	$x^{1/2} = \sqrt{x}$	x to $1/2 = \sqrt{x}$
N-RN.1	Cube root exponent	$x^{1/3}$	x to the $1/3$
N-RN.2	Simplify radical	$\sqrt{48} = 4\sqrt{3}$	$\sqrt{48} = 4 \sqrt{3}$
F-IF.7b	Square root function	$f(x) = \sqrt{x - 2}$	$f(x) = \sqrt{x - 2}$
A-REI.2	Rationalize denom.	$1/\sqrt{3}$	1 over $\sqrt{3}$

Trigonometric Functions (F-TF)

Standard	What You Want	Type in Equation Column	Students See (rendered image)
F-TF.1	Radian measure	$\pi/4$	π over 4
F-TF.2	Unit circle values	$\sin(30\text{deg}) = 1/2$	$\sin(30 \text{ deg}) = 1/2$
F-TF.2	Cosine value	$\cos(60\text{deg}) = 1/2$	$\cos(60 \text{ deg}) = 1/2$
F-TF.5	Model with trig	$y = 3\sin(2x) + 1$	$y = 3 \sin(2x) + 1$
F-TF.8	Pythagorean identity	$\sin^2(x) + \cos^2(x) = 1$	\sin sq + \cos sq = 1

Sequences & Series (F-IF, F-BF, F-LE)

Standard	What You Want	Type in Equation Column	Students See (rendered image)
F-BF.2	Arithmetic sequence	$a + (n-1) * d$	$a + (n-1) x d$
F-BF.2	Geometric sequence	$a * r^{(n-1)}$	a x r to $(n-1)$
F-LE.2	Geometric growth	2, 6, 18, 54, ...	x 3 each term

Sequences & Series (F-IF, F-BF, F-LE) (continued)

Standard	What You Want	Type in Equation Column	Students See (rendered image)
A-SSE.4	Geometric series	$a * (1 - r^n) / (1 - r)$	<i>finite series formula</i>

DIFFERENTIATION BAND

Content from the grade below (remediation/review) and above (enrichment/extension).

Below Grade: Geometry / Algebra 1 Review

Standard	What You Want	Type in Equation Column	Students See (rendered image)
A-REI.4	Quadratic formula	$(-b \pm \sqrt{b^2 - 4ac}) / (2a)$	<i>quadratic formula</i>
A-SSE.3	Factor quadratic	$(x+2)(x+3)$	$(x+2)(x+3)$
G-SRT.8	Pythagorean theorem	$a^2 + b^2 = c^2$	$a \text{ sq} + b \text{ sq} = c \text{ sq}$
F-IF.7a	Graph quadratic	$y = x^2 - 4x + 3$	$y = x \text{ sq} - 4x + 3$

Above Grade: Pre-Calculus Preview

Standard	What You Want	Type in Equation Column	Students See (rendered image)
F-TF.3	Trig identities	$\sin(2x) = 2\sin(x)\cos(x)$	<i>double angle</i>
F-TF.7	Inverse trig	$\arcsin(1/2) = 30\text{deg}$	$\arcsin(1/2) = 30$
+	Law of cosines	$c^2 = a^2 + b^2 - 2ab\cos(C)$	<i>law of cosines</i>
+	Law of sines	$a/\sin(A) = b/\sin(B)$	<i>law of sines</i>
+	Limit concept	$(x^2 - 4) / (x - 2)$	<i>approaches 4</i>

Smarter Balanced (SBAC) Test Prep Tips

These equations align with SBAC Claim 1 (Concepts & Procedures). For Claims 2-4 (Problem Solving, Reasoning, Modeling), embed equations in word problems using the Question column. Stars mark SBAC priority standards tested most heavily.

SBAC Question Types in SheetFormR: Multiple Choice = Selected Response | Checkbox = Multiple Select | Short Answer = Constructed Response

Practice with real SBAC items: sampleitems.smarterbalanced.org | Practice/Training Tests: practice.smarterbalanced.org

Common Mistakes:

Always enable "Render Math Equations" in Build Options before building. Use * for multiplication (not the letter x).

Fractions: a/b renders as a stacked fraction. Use parentheses for complex fractions: $(x^2 - 1) / (x + 1)$.

The "Students See" column describes the rendered image — it is NOT what you type. Preview your form to check equations.