

SheetFormR Math Mode — Grade 9

Algebra 1 | CCSS Domains: N-RN | A-SSE | A-APR | A-CED | A-REI | F-IF | F-BF | F-LE

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() = square root pi = pi > = < = = inequalities |x| = abs value

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

Quick Start: You type: $(-b + \sqrt{b^2 - 4ac})/(2a)$ -> *Students see: the quadratic formula rendered as a crisp image*

Seeing Structure in Expressions (A-SSE)

Standard	What You Want	Type in Equation Column	Students See (rendered image)
A-SSE.1	Interpret parts	$3x^2 + 5x - 2$	$3x \text{ sq} + 5x - 2$
A-SSE.1b	Interpret compound	$P(1 + r)^n$	$P(1 + r)$ to the n
A-SSE.2	Rewrite expression	$x^2 - 9 = (x+3)(x-3)$	difference of squares
A-SSE.3a	Factor quadratic	$(x + 2)(x + 3) = 0$	$(x+2)(x+3) = 0$
A-SSE.3b	Complete the square	$(x + 3)^2 - 4$	$(x + 3) \text{ sq} - 4$
A-SSE.3c	Exponential form	$2^{(t/10)}$	2 to the $(t/10)$

Polynomial Arithmetic (A-APR)

Standard	What You Want	Type in Equation Column	Students See (rendered image)
A-APR.1	Add polynomials	$(3x^2 + 2x) + (x^2 - 5x)$	$(3x \text{ sq}+2x)+(x \text{ sq}-5x)$
A-APR.1	Multiply polynomials	$(x + 3)(x - 2)$	$(x + 3)(x - 2)$
A-APR.1	Multiply binomials	$(2x + 1)(x + 4)$	$(2x + 1)(x + 4)$

Creating & Solving Equations (A-CED, A-REI)

Standard	What You Want	Type in Equation Column	Students See (rendered image)
A-CED.1	Create equation	$2x + 5 = 17$	$2x + 5 = 17$
A-CED.2	Two-variable eq.	$3x + 2y = 12$	$3x + 2y = 12$
A-CED.3	System of equations	$2x + y = 10$	$2x + y = 10$
A-CED.4	Rearrange formula	$A = \pi * r^2$	$A = \pi r \text{ squared}$
A-REI.1	Justify steps	$3(x - 1) = 12$	$3(x - 1) = 12$
A-REI.3	Linear inequality	$-3 \leq x \leq 5$	$-3 \leq x \leq 5$
A-REI.3	Absolute value	$ 2x - 1 = 7$	$ 2x - 1 = 7$
A-REI.4	Quadratic formula	$(-b + \sqrt{b^2 - 4ac}) / (2a)$	quadratic formula
A-REI.4b	Discriminant	$b^2 - 4ac$	$b \text{ sq} - 4ac$
A-REI.6	Solve system	$y = 3x - 2$	$y = 3x - 2$
A-REI.10	Graph of equation	$y = x^2 - 4x + 3$	$y = x \text{ sq} - 4x + 3$

Functions (F-IF, F-BF, F-LE)

Standard	What You Want	Type in Equation Column	Students See (rendered image)
F-IF.1	Function notation	$f(x) = 2x^2 - 3x + 1$	$f(x) = 2x \text{ sq} - 3x + 1$
F-IF.2	Evaluate function	$f(3) = 2(3)^2 - 3(3) + 1$	$f(3) = 2(9) - 9 + 1$
F-IF.4	Interpret features	$f(x) = (x - 1)^2 - 4$	vertex at $(1, -4)$
F-IF.7a	Graph linear	$y = 2x + 3$	$y = 2x + 3$
F-IF.7a	Graph quadratic	$y = -x^2 + 4$	$y = -x \text{ sq} + 4$
F-IF.8a	Vertex form	$a(x - h)^2 + k$	$a(x - h) \text{ sq} + k$
F-BF.1	Build function	$f(x) = 3x + 2$	$f(x) = 3x + 2$
F-BF.3	Transformations	$f(x - 2) + 3$	shift right 2, up 3
F-LE.1	Linear vs exponential	$y = 100 * 1.05^t$	$y = 100 x 1.05^t$
F-LE.2	Exponential decay	$y = 500 * 0.8^t$	$y = 500 x 0.8^t$
N-RN.1	Rational exponents	$x^{(1/2)} = \sqrt{x}$	$x \text{ to } 1/2 = \sqrt{x}$
N-RN.2	Rewrite radicals	$\sqrt{x^3} = x^{(3/2)}$	$\sqrt{x \text{ cubed}} = x^{(3/2)}$

DIFFERENTIATION BAND

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

Below Grade: Grade 8 Review

Standard	What You Want	Type in Equation Column	Students See (rendered image)
8.EE.7	Solve linear equation	$4(x-2) = 3x + 1$	$4(x-2) = 3x + 1$
8.EE.8	Systems	$2x + y = 10$	$2x + y = 10$
8.F.4	Slope from points	$(y_2 - y_1) / (x_2 - x_1)$	<i>slope formula</i>
8.EE.2	Square roots	$\sqrt{49} = 7$	$\sqrt{49} = 7$

Above Grade: Geometry / Algebra 2 Preview

Standard	What You Want	Type in Equation Column	Students See (rendered image)
G-GPE.1	Circle equation	$(x-h)^2 + (y-k)^2 = r^2$	<i>circle equation</i>
A-APR.2	Remainder theorem	$f(x) / (x - c)$	<i>polynomial division</i>
A-APR.3	Zeros of polynomial	$x^3 - 6x^2 + 11x - 6$	<i>cubic expression</i>
F-BF.4	Inverse function	$f^{-1}(x)$	<i>inverse notation</i>

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.