SheetFormR Math Mode — Grade 7

CCSS Domains: 7.RP | 7.NS | 7.EE | 7.G | 7.SP

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   pi = pi   deg = degrees   >= <= = inequalities |x| = abs value

Mixed Numbers: Type a SPACE between the whole number and fraction. 2 1/3 = mixed number. 21/3 = twenty-one thirds.

Quick Start: You type: pi * r^2 ->   *Students see: a rendered image: pi x r squared*

Ratios & Proportional Relationships (7.RP) -- SBAC Priority

Standard	What You Want	Type in Equation Column	Students See (rendered image)
★ 7.RP.1	Unit rate	240/3	*240 over 3*
★ 7.RP.1	Complex fraction rate	(1/2)/(1/4)	*(1/2) over (1/4)*
★ 7.RP.2a	Test proportional	5/2 = 10/4	*5/2 = 10/4*
★ 7.RP.2b	Constant of prop.	y = 3x	*y = 3x*
★ 7.RP.2c	Unit rate as slope	y/x = k	*y over x = k*
★ 7.RP.3	Percent problems	0.15 * 80	*0.15 x 80*
★ 7.RP.3	Percent increase	(25 - 20)/20	*(25-20) over 20*
★ 7.RP.3	Tax/tip/discount	45 * 0.08	*45 x 0.08*
★ 7.RP.3	Simple interest	500 * 0.04 * 3	*500 x 0.04 x 3*

Rational Number Operations (7.NS) -- SBAC Priority

Standard	What You Want	Type in Equation Column	Students See (rendered image)
★ 7.NS.1a	Additive inverse	p + (-p) = 0	*p + (-p) = 0*
★ 7.NS.1b	Add integers	-5 + 3	*-5 + 3*
★ 7.NS.1c	Subtract integers	4 - (-7)	*4 - (-7)*
★ 7.NS.1d	Subtract as add neg.	3 - 8 = 3 + (-8)	*3 - 8 = 3 + (-8)*
★ 7.NS.2a	Multiply negatives	-3 * (-4)	*-3 x (-4)*
★ 7.NS.2b	Divide negatives	-12/4	*-12 over 4*
★ 7.NS.2c	Rational x rational	-1/2 * 3/4	*-1/2 x 3/4*
★ 7.NS.2d	Convert frac to dec	1/3 = 0.333...	*1/3 = 0.333...*
★ 7.NS.3	Mixed operations	-2 * (3 + (-5))	*-2 x (3 + (-5))*

Expressions & Equations (7.EE) -- SBAC Priority

Standard	What You Want	Type in Equation Column	Students See (rendered image)
★ 7.EE.1	Combine like terms	4x + 2x - 3	*4x + 2x - 3*
★ 7.EE.1	Distributive	3(x + 4)	*3(x + 4)*
★ 7.EE.1	Factor expression	6x + 12 = 6(x + 2)	*6x+12 = 6(x+2)*
★ 7.EE.2	Rewrite expression	1.05p = p + 0.05p	*1.05p = p + 0.05p*
★ 7.EE.3	Multi-step estimate	3.8 * 12.1	*3.8 x 12.1*
★ 7.EE.4a	Two-step equation	2x + 3 = 11	*2x + 3 = 11*
★ 7.EE.4a	Equation with neg.	3x - 7 = -1	*3x - 7 = -1*
★ 7.EE.4b	Two-step inequality	2x - 5 >= 3	*2x - 5 >= 3*
★ 7.EE.4b	Inequality (neg coeff)	-x/4 + 2 < 5	*-x/4 + 2 < 5*

Geometry (7.G)

Standard	What You Want	Type in Equation Column	Students See (rendered image)
7.G.1	Scale drawing	3/1 * 5 = 15	*scale factor x side*
7.G.2	Triangle condition	3 + 4 > 5	*3 + 4 > 5*
7.G.4	Circle circumference	2 * pi * r	*2 x pi x r*
7.G.4	Circle area	pi * r^2	*pi x r squared*
7.G.5	Supplementary angles	180deg - 65deg	*180 - 65 degrees*
7.G.5	Complementary angles	90deg - 35deg	*90 - 35 degrees*
7.G.5	Vertical angles	x = 40deg	*x = 40 degrees*
7.G.6	Prism SA	2*l*w + 2*l*h + 2*w*h	*SA formula*
7.G.6	Prism volume	l * w * h	*l x w x h*
7.G.6	Composite area	pi * r^2 + l * w	*pi x r sq + l x w*

Below Grade: Grade 6 Review

Standard	What You Want	Type in Equation Column	Students See (rendered image)
6.NS.1	Divide fractions	2/3 / 4/5	2/3 / 4/5
6.EE.1	Whole-num exponents	5^3	5 cubed
6.EE.5	One-step equation	x + 5 = 12	x + 5 = 12
6.G.1	Triangle area	1/2 * b * h	1/2 x b x h
6.NS.7	Absolute value	|-7| = 7	|-7| = 7

Above Grade: Grade 8 Preview

Standard	What You Want	Type in Equation Column	Students See (rendered image)
8.EE.1	Integer exponents	3^4	3 to the 4th
8.EE.1	Exponent rules	3^2 * 3^3 = 3^5	3 sq x 3 cubed = 3^5
8.EE.2	Square/cube roots	sqrt(64)	square root of 64
8.EE.4	Scientific notation	6.02 * 10^23	6.02 x 10 to the 23rd
8.EE.7	Multi-step equation	4(x - 2) = 3x + 1	4(x-2) = 3x + 1
8.F.1	Function notation	f(x) = 2x + 3	f(x) = 2x + 3
8.G.7	Pythagorean theorem	a^2 + b^2 = c^2	a sq + b sq = c sq

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.