

Tulare County  
Office of Education

*Jim Vidak, County Superintendent of Schools*

Using SBAC Tools to  
Support Powerful Instruction

# SBAC Math Handout



# Grade 7

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# Grade 7 SBAC Math Assessment Snapshot

Unit	Claim 1: Concepts and Procedures 17-20 Total Questions -At least 7 CAT items will be DOK 2 or higher	Claim 2: Problem Solving	Claim 4: Modeling and Data Analysis	Claim 3: Communicating Reasoning 8-10 Questions -At least 2 CAT items will be DOK 3 or higher. -80% of Claim 3 comes from standards below.	
	8-10 Total Questions -At least 2 CAT items will be DOK 3 or higher -80% of Claim 2 & 4 comes from Standards below				
	<b>Target A (Priority)</b> 7.RP.A Analyze proportional relationships and use them to solve real-world problems. 7.RP.1, 2, 3	8-9	7.RP.A	7.RP.A	7.RP.2
	<b>Target D (Priority)</b> 7.EE.B Solve real-life and mathematical problems using numerical and algebraic expressions and equations. 7.EE.3, 4		7.EE.B	7.EE.B	
	<b>Target B (Priority)</b> 7.NS.A Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers. 7.NS.1, 2, 3	5-6	7.NS.A	7.NS.A	7.NS.A 7.NS.1 7.NS.2
	<b>Target C (Priority)</b> 7.EE.A Use properties of operations to generate equivalent expressions. 7.EE.1, 2		7.EE.A		7.EE.1 7.EE.2
	<b>Target E (Supporting)</b> 7.G.A Draw, construct, and describe geometrical figures and describe the relationship between them. 7.G.1, 2, 3	2-3	7.G.A	7.G.A	
	<b>Target F (Supporting)</b> 7.G.B Solve real-life and mathematical problems involving angle measure, area, surface area, and volume 7.G.4, 5, 6		7.G.B	7.G.B	
	<b>Target G (Supporting)</b> 7.SP.A Use random sampling to draw inferences about a population. 7.SP.1, 2	1-2		7.SP.A	
	<b>Target H (Supporting)</b> 7.SP.B Draw informal comparative inferences about two populations. 7.SP.3, 4		7.SP.B		
	<b>Target I (Supporting)</b> 7.SP.C Investigate chance processes and develop, use, and evaluate probability events. 7.SP. 5, 6, 7, 8		7.SP.C		

	Item	Claim (circle one)
A	<p>Megan has \$2500. She spends money on the following:</p> <ul style="list-style-type: none"> <li>• \$800 on rent</li> <li>• \$400 on food</li> <li>• \$200 on utility services</li> <li>• \$250 on loan payments</li> <li>• \$x on other expenses</li> </ul> <p>Let <math>y</math> represent the amount of money in dollars Megan has left. Write an equation that represents the relationship between the amount of money Megan spends on other expenses and the amount of money Megan has left.</p>	1 2 3 4
B	<p><b>Example Stem 2:</b> Enter the value of <math>n</math> so that the expression <math>(-y + 5.3) + (7.2y - 9)</math> is equivalent to <math>6.2y + n</math>.</p>	1 2 3 4
C	<p>Elly poured <math>\frac{1}{10}</math> gallon of water into an empty bottle. Now it is <math>\frac{1}{2}</math> full. How many <b>cups</b> of water does a full bottle hold?</p> <ul style="list-style-type: none"> <li>• There are 16 cups in one gallon.</li> </ul> <p>Enter the total number of <b>cups</b> that are in the bottle when it is full.</p>	1 2 3 4
D	<p>Given <math>x</math> and <math>y</math> are rational numbers, when is <math> x + y  =  x  +  y </math> true?</p> <p>A. This is never true.          B. This is always true.          C. This is true when <math>x</math> and <math>y</math> have opposite signs.          D. This is true when <math>x</math> and <math>y</math> have the same sign.</p>	1 2 3 4

# Mathematics

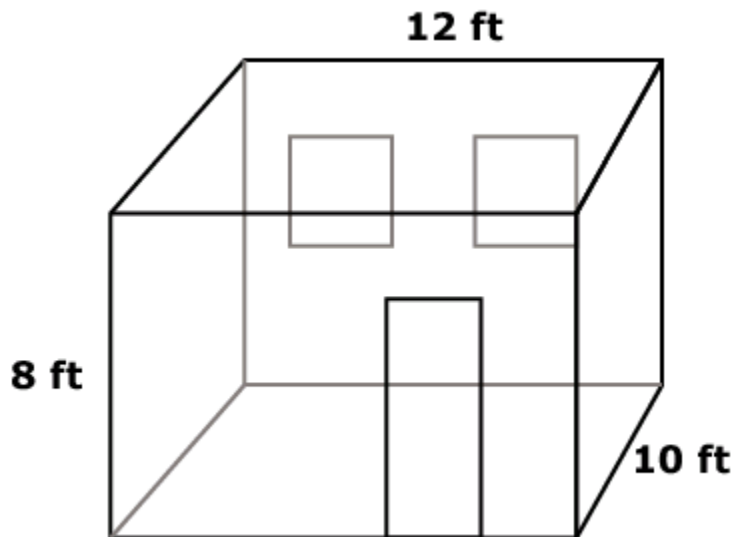
<b>Item</b>	<b>DOK</b> <b>Circle one</b>	<b>Comments</b>
#1	1 2 3 4	
#2	1 2 3 4	
#3	1 2 3 4	
#4	1 2 3 4	
#5	1 2 3 4	
#6	1 2 3 4	
#7	1 2 3 4	
#8	1 2 3 4	

### ***Let's Paint a Room***

Your friend Sam wants to paint her room. She wants to paint the ceiling white and the four walls purple.

You are helping Sam determine the cost and the amount of time needed to paint her room.

The room is shaped like a rectangular prism with a height of 8 feet, length of 12 feet, and width of 10 feet as shown.



Additional information about Sam's room:

- The door has an area of 22 square feet.
- The room has 2 square windows.
- Each window opening is 2 feet by 2 feet.

# Grade 7 Mathematics

## Let's Paint a Room Performance Task

1

What is the area, in square feet, of the ceiling?

2

Sam needs to figure out how much purple paint to buy.  
Calculate for her the total area, in square feet, of the four **walls**.  
She will **not** paint the door or windows.

3

Part way through painting her room, Sam runs out of paint.

- She estimates that there are about 125 square feet left to paint.
- The purple paint that Sam is using is **only** available in 1-quart cans.  
(Assume she must buy whole cans of paint.)
- Each can of paint covers 40 square feet.

How many cans of paint does Sam **need** to buy to finish painting her room?  
Explain to Sam why she needs this many cans of paint.

## Grade 7 Mathematics

### Let's Paint a Room Performance Task

4

You decide to paint your room, too.

Your room has 300 square feet of wall space to paint.

Sam says it took her 10 minutes to paint 25 square feet.

At this rate, how many **hours** would it take Sam to paint your room?

5

Sam and you are going to paint your room together.

Sam takes 10 minutes to paint 25 square feet.

It takes you 5 minutes to paint 25 square feet.

Sam says, "If we paint together, then it will take 15 minutes for us to cover 50 square feet."

Give an explanation to convince Sam that she is **incorrect**.



## Mathematics Interim Assessment Blocks

Grade 3	Grade 4	Grade 5
Operations and Algebraic Thinking	Operations and Algebraic Thinking	Operations and Algebraic Thinking
Number and Operations – Fractions	Number and Operations – Fractions	Number and Operations – Fractions
Measurement and Data	Measurement and Data	Measurement and Data
Number and Operations in Base Ten	Number and Operations in Base Ten	Number and Operations in Base Ten
Geometry*	Geometry	Geometry
Mathematics Performance Task	Mathematics Performance Task	Mathematics Performance Task

Grade 6	Grade 7	Grade 8
Ratios and Proportional Relationships	Ratio and Proportional Relationships	Expressions & Equations I
The Number System	The Number System	Expressions & Equations II (with Prob/Stat)
Expressions and Equations	Expressions and Equations	The Number System*
Geometry	Geometry	Functions
Statistics and Probability	Statistics and Probability	Geometry
Mathematics Performance Task	Mathematics Performance Task	Mathematics Performance Task

High School	
Algebra and Functions I - Linear Functions, Equations, and Inequalities	Geometry Congruence*
Algebra and Functions II - Quadratic Functions, Equations, and Inequalities	Geometry Measurement and Modeling*
Geometry and Right Triangle Trigonometry	Interpreting Functions*
Statistics and Probability	Number and Quantity*
Seeing Structure in Expressions/Polynomial Expressions*	Mathematics Performance Task

\* IAB is new for 2017–18