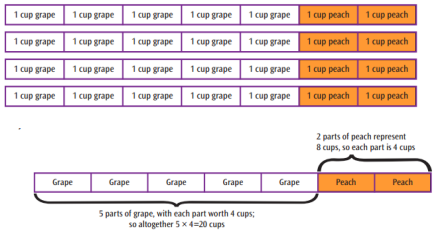
Parent Guide for Grade 7 Mathematics

Major Learning Targets for This Course

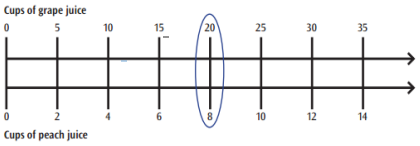
Ratios and Proportional Relationships		
Students will understand and analyze proportional relationships and use them to solve problems.		
"I can recognize a situation that describes a proportional relationship."	"I can use proportional reasoning to solve problems."	"I can use different visual representations to solve problems about proportions."

Example Task:
Situation: A juice mixture calls for 5 cups of grape juice for every 2 cups of peach juice.
How much peach juice would you need to add to 20 cups of grape juice?
Does your answer make sense? How do you know?

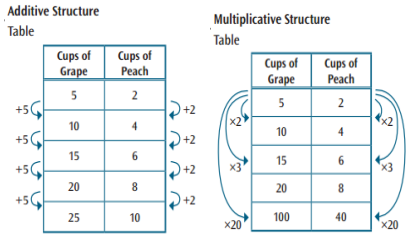
Use Tape Diagrams



Use a Double Number Line



Use a Table



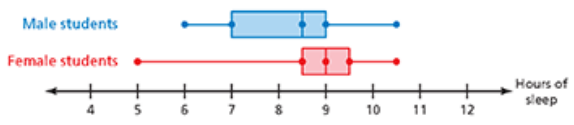
Expressions and Equations		
Students will write expressions and equations in one variable and use these equations to solve problems.		
"I can use variables to represent quantities in a real-world or mathematical problem."	"I can write equations and inequalities to solve problems."	"I can use different visual representations to solve equations."

$52.50			
p	p	p	$11.25

Example Task:
The youth group is going on a trip to the state fair. The trip costs $52.50 per student. Included in that price is $11.25 for a concert ticket and the cost of 3 passes, 2 for rides and 1 for game booths. Each of the passes costs the same price.
Write an equation representing the cost of the trip, and determine the price of 1 pass.

Statistics		
Students will make inferences about populations based on samples and develop, use, and evaluate probability models.		
"I understand that we can use data from a representative sample of a population to make predictions."	"I can use median, mean, interquartile range, and mean absolute deviation to infer about comparisons of two populations."	"I can use organized lists, tables, tree diagrams, and simulations to find probabilities of compound events."

Example Task:



Given the distributions shown, what inferences can be made about the amount of sleep that students are getting each night? Use measures of center and variability to support your conclusions.

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Expected Behaviors in Math Class

Students will…

- Consider available tools to help them solve problems and deepen understanding (including hands-on tools and technology).
- Look for patterns and connections.
- Explain their thinking and their process for solving a problem.
- Make predictions and estimations.
- Decide if an answer is reasonable.
- Justify conclusions.
- Communicate ideas clearly verbally and in writing, using math vocabulary when appropriate.
- Apply mathematics to solve problems in everyday life.

How Can I Support My Student in This Course?

Access Google Classroom Regularly (if Applicable)

⇨Look at the Stream for daily announcements and a weekly schedule.
⇨View the Classwork for assignment information and support.

Encourage Multiple Strategies and Representations of the Problem

⇨Ask your student to solve the problem in different ways.
⇨Encourage the use of different representations (e.g., symbols, words, or pictures/visuals), and have them make connections between representations.

Ask Questions & Encourage Your Student to Ask Questions

⇨When your student is stuck, don't simply tell them the correct answer. Ask questions like:

- "What is the question in the problem/task?"
- "What do you understand/know from the task?"
- "How do you know?" Listen while your student explains their mathematical reasoning and ask, "Does your answer make sense?" based on the context of the problem or task.

⇨Encourage your student to write down questions to bring to their teacher or peer the next day.

Value Mistakes

⇨Students are learning when they are making mistakes; create an environment where your student feels comfortable making a mistake and learning from it.

Acknowledge Effort over Answers and Speed

⇨Celebrate how hard your student is working, whether their answer is correct or not.
⇨When your student is stuck, remind them that learning can be challenging, and if they continue to practice and work hard, they will improve.

For more information, visit scusd.edu/math or contact Mikila-Fetzer@scusd.edu, Director of PL, Science, EdTech, PE, & Mathematics

SCUSD's Equity & Access Guiding Principle:

All students are given an equal opportunity to graduate with the greatest number of postsecondary choices from the widest array of options.

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