

Parent Guide for Integrated Math 1

Major Learning Targets for This Course

Linear and Exponential Functions

Students will use tables, graphs, and equations to represent situations that can be modeled by a linear or exponential function.

"I can read a word problem and represent it with a table of values, a graph, or an equation."

"I can solve a linear equation (or system of linear equations) and understand if my answer makes sense."

"I can graph a linear equation and understand what the slope and y-intercept mean in terms of the situation that it models."

Example Task:

Situation: A photobook company charges a \$12 flat fee for a photo book, plus \$1 for every page in the book. Use C to represent the cost of the photobook, and p to represent the number of pages.

Create a Table

p			
C			

Draw a Graph



Write an Equation

How much would it cost for a photo book with 16 pages?

Does your answer make sense? How do you know?

Statistics

Students will show, summarize, and analyze statistical data.

"I can create a scatter plot to show my data points."

"I can find a line of best fit for my data."

"I can make sense of my data, look for trends, and make inferences and predictions."

Example Task:

A ring toss game at a fair is set up so that only a small percentage of players win. Each day, the fair records the number of players and the number of winners. The data is in the table below.

Number of players	Number of winners
11	2
36	6
36	5
39	8
35	7
18	3
10	1

- 1) Create a scatter plot of the data
- 2) Write an equation for a line that best fits the data
- 3) Interpret the slope and the y-intercept in terms of the context
- 4) If 100 people played the game, predict how many would win

Geometry: Congruence and Constructions

Students will understand transformations, congruence of figures, and do geometric constructions.

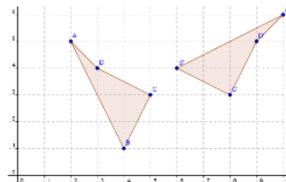
"I can rotate, reflect, translate, and dilate figures in the coordinate plane (x/y grid)."

"I can determine whether or not two figures are congruent to one another (have the same size and shape)."

"I can use tools (e.g. technology or a straightedge and compass) to perform various geometric constructions."

Example Task:

Are the two figures congruent? How do you know? If they are, describe a series of transformations that proves they are congruent.



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

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