



MATH QUEST

**MODULE 2
LESSON 1**

RATIONAL NUMBERS

GATEWAY OF THE STARLIGHT REALM

THE PROTAGONIST, A SEASONED COSMIC EXPLORER, STUMBLES UPON A MYSTERIOUS GATEWAY HIDDEN IN THE HEART OF THE MILKY WAY. UPON ACTIVATION, THEY FIND THEMSELVES IN A STUNNING STARLIT REALM.

NAVIGATING THIS CELESTIAL LABYRINTH, THEY UNCOVER THE FIRST PIECE OF AN ANCIENT MAP THAT HINTS AT A GRAND COSMIC DESIGN.



GREETINGS. THE COSMIC ENERGIES SENSED YOUR ADVENTUROUS SPIRIT AND GUIDED YOU TO THIS ENCHANTED REALM. YOU ARE CHOSEN TO EMBARK ON A QUEST THAT TRANSCENDS GALAXIES. TO UNLOCK THE SECRETS OF THE STARLIT REALM, YOU MUST PROVE YOUR COSMIC PROWESS. SOLVE THESE THREE MATHEMATICAL ENIGMAS, AND THE GATEWAY SHALL YIELD. I SENSE A COSMIC CHALLENGE LIES AHEAD. FELLOW COSMIC EXPLORER, YOUR ASSISTANCE IS INVALUABLE. TOGETHER, LET'S UNRAVEL THE CELESTIAL MYSTERIES.



WORD PROBLEM 1: Write as Fractions

The cosmic energies sensed your adventurous spirit and guided you to this enchanted realm. You are chosen to embark on a quest that transcends galaxies.



WORD PROBLEM 2: Identify and Classify

In a bookstore, there are three sections of books. The lengths of the bookshelves in each section are 4.5 feet, -3.75 feet, and 6 feet. Identify and classify the lengths as rational numbers.



WORD PROBLEM 3: Write as Fractions

John's car can travel 300.6 kilometers on a full tank of gas. Write the distance his car can travel as a fraction.

Word Problem 1:

Word Problem 2:

Word Problem 3:

THE RATIONAL ADVENTURE

GREETINGS, INTREPID MATHEMATICIANS! WELCOME TO THE RATIONAL ADVENTURE, A JOURNEY FILLED WITH MATHEMATICAL MARVELS AND RATIONAL REVELATIONS. YOUR QUEST INVOLVES NAVIGATING THROUGH FIVE CHALLENGES THAT WILL TEST YOUR SKILLS IN WRITING AND IDENTIFYING RATIONAL NUMBERS.

CHALLENGE 1: "BANK BALANCE BONANZA"

EMBARK ON A FINANCIAL ESCAPE WITH SARAH. HER BANK ACCOUNT BALANCE IS $-\$75$. WRITE HER ACCOUNT BALANCE AS A FRACTION TO UNLOCK THE PATH TO THE VAULT OF FINANCIAL WISDOM.



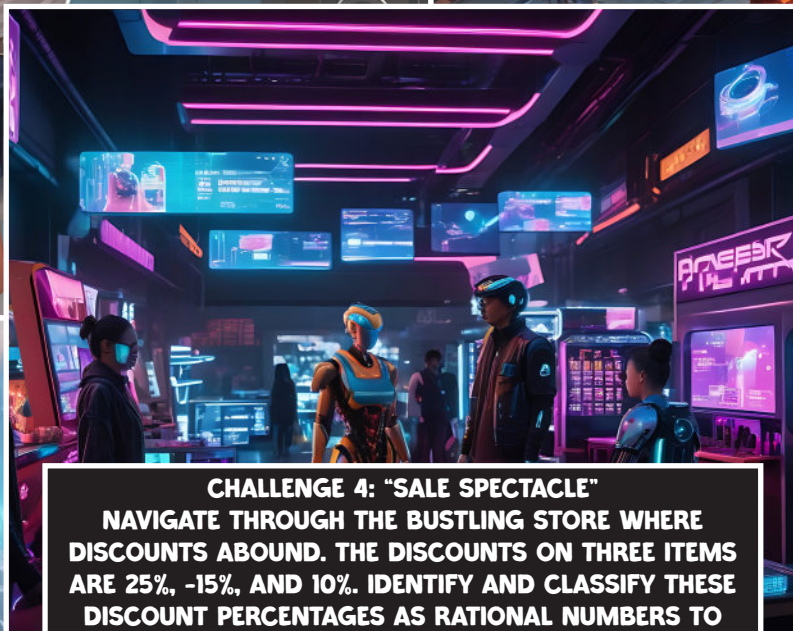
CHALLENGE 2: "VIDEO GAME ODYSSEY"

ENTER THE REALM OF GAMING WHERE POINTS HOLD THE KEY TO VICTORY. PLAYER A EARNED 50 POINTS, PLAYER B LOST -30 POINTS, AND PLAYER C EARNED -15 POINTS. IDENTIFY AND CLASSIFY THEIR SCORES AS RATIONAL NUMBERS TO REVEAL THE GATEWAY TO THE PIXEL PALACE.

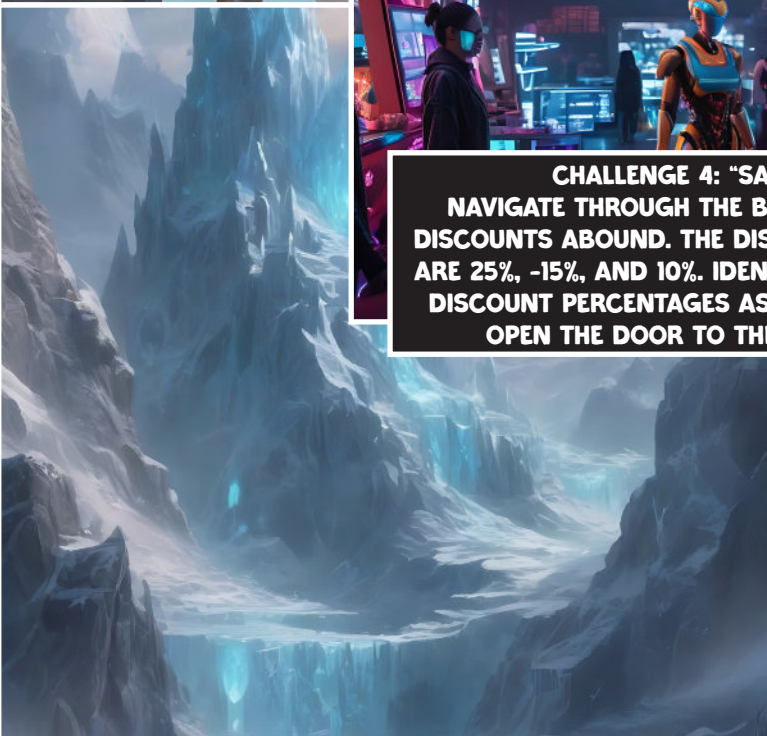


CHALLENGE 4: "SALE SPECTACLE"

NAVIGATE THROUGH THE BUSTLING STORE WHERE DISCOUNTS ABOUND. THE DISCOUNTS ON THREE ITEMS ARE 25%, -15% , AND 10% . IDENTIFY AND CLASSIFY THESE DISCOUNT PERCENTAGES AS RATIONAL NUMBERS TO OPEN THE DOOR TO THE BARGAIN BAZAAR.



CHALLENGE 3: "TEMPERATURE TEASERS" STEP INTO THE CHILLY WORLD OF TEMPERATURES. AT 3 A.M., THE TEMPERATURE WAS -12.5°C . WRITE THIS TEMPERATURE AS A FRACTION TO UNLOCK THE HIDDEN PORTAL TO THE THERMOMETER TOWER.



CHALLENGE 5: "DRIVING DELIGHT"

EMBARK ON A ROAD TRIP WITH ALEX. HE DROVE HIS CAR FOR 200.75 MILES. WRITE THE DISTANCE HE DROVE AS A FRACTION TO REACH THE FINAL DESTINATION - THE MILESTONE MEADOW.



AS YOU CONQUER EACH CHALLENGE, YOU PROVE YOUR MASTERY OF RATIONAL NUMBERS. CAN YOU SUCCESSFULLY COMPLETE THE RATIONAL ADVENTURE AND EMERGE AS THE TRUE CHAMPIONS OF RATIONALITY?

Challenge 1: "Bank Balance Bonanza"

Challenge 2: "Video Game Odyssey"

Challenge 3: "Temperature Teasers"

Challenge 4: "Sale Spectacle"

Challenge 5: "Driving Delight"



SGT. GENU



NEW CHARACTER UNLOCKED



TO BE CONTINUED...

THE GALACTIC WARRIOR - SGT. GENU

HIS PHYSIQUE, A TESTAMENT TO THE COUNTLESS BATTLES FOUGHT, SPEAKS OF RAW POWER AND INDOMITABLE WILL. MUSCLES SCULPTED BY THE GRAVITATIONAL FORCES OF COSMIC CONFLICTS RIPPLE BENEATH HIS BATTLE-WORN ARMOR. HIS EYES, GLEAMING WITH THE INTENSITY OF DISTANT GALAXIES, HOLD A PROFOUND KINDNESS THAT TRANSCENDS THE FEROCITY OF HIS WARRIOR'S VISAGE.

THE COSMIC DANCE REQUIRES NOT JUST POWER, BUT UNDERSTANDING. IN EVERY CLASH, I SEEK TO UNRAVEL THE THREADS OF COMPASSION AMIDST THE CHAOS.



SEARCH SYSTEM

SEARCH SYSTEM



Rational Numbers

L2a: Write Rational Numbers as Fractions

1. Write rational numbers as fractions.

L2b: Identify and Classify Rational Numbers

1. Identify and classify rational numbers

Problem 1: Write as Fractions

Samantha went on a road trip and traveled 150.75 miles. Write the distance she traveled as a fraction.

Distance traveled: 150.75 miles

Fraction: $\frac{603}{4}$

Problem 2: Identify and Classify

In a bookstore, there are three sections of books. The lengths of the bookshelves in each section are 4.5 feet, -3.75 feet, and 6 feet. Identify and classify the lengths as rational numbers.

Bookshelf lengths: 4.5 feet, 3.75 feet, 6 feet

Rational Numbers: $\frac{9}{2}$ feet, $\frac{15}{4}$ feet, $\frac{6}{1}$ feet

Problem 3: Write as Fractions

John's car can travel 300.6 kilometers on a full tank of gas. Write the distance his car can travel as a fraction.

Distance John's car can travel: 300.6 kilometers

Fraction: $\frac{1503}{5}$

The Rational Adventure

Challenge 1:

Bank account balance: -\$75

Fraction: $-\frac{75}{1}$

Challenge 2:

Player A's score: 50

Player B's score: -30

Player C's score: -15

Rational Numbers: $\frac{50}{1}$; $-\frac{30}{1}$; $-\frac{15}{1}$

Challenge 3:

Temperature: -12.5°C

Fraction: $-\frac{25}{2}^{\circ}\text{C}$

Challenge 4:

Discount percentages: 25%, -15%, 10%

Rational Numbers: $\frac{25}{100}\%$, $-\frac{15}{100}\%$, $\frac{10}{100}\%$

Challenge 5:

Distance driven: 200.75 miles

Fraction: $\frac{803}{4}$