JEI Learning Center

La Canada/La Crescenta

Topics of Discussion

- **JEI Math and English (regular program)**
  The philosophy behind the methodology
- **JEI Advanced Math**
  The Diagnostic Test and Interim Tests

JEI Self-Learning Method

"All children are endowed with great academic potential that can be developed to the fullest extent when provided with proper learning environment and guidance."

Elements of the Self-Learning Method

- A programmed series of workbooks that makes learning easy with specific objectives, a spiral structure, small step texts, active response and participation, and sufficient practice.
- A comprehensive diagnostic system to determine the weaknesses and strengths and to prescribe workbooks based on specific needs.
- An individual learning program that takes place daily to keep the retention rate high and to keep students motivated with confidence.

JEI Evaluation System

JEI provides two types of evaluation tools:

1. **The Diagnostic/Achievement Test**
2. **The Interim Test**

The Diagnostic Test

- Each student takes a comprehensive, diagnostic test that spans multiple grade levels.
- JEI's diagnostic computer system analyzes the results and prescribes an appropriate learning program.
- The test is comprised of multiple choice questions for JEI Math, and multiple choice and short answer questions for JEI English.

Individual Progress Prescription Report (IPPR)

- The IPPR is a detailed computer analysis of diagnostic test results.
- It contains 5 sections: Member Information, Analysis by Domains, Prescription Program, Prospect Progress, Analysis of Errors.
- It pinpoints problem areas and unknown learning capabilities.
- The instructor can modify the workbook prescription as needed.

Sample IPPR

INDIVIDUAL PROGRESS PRESCRIPTION REPORT(I)

Region : NORTHEAST **State : New York** **Center : Rego Park**

Name	Date of Birth	Grade	Subject	Level	Test Type	Input Date
Amanda Fricke	01.01.2007	2ND	Math	G	Diagnosis	07.06.2015
S/P	G01 : Recognizing equal parts, understanding fractions and decimals, comparing fractions and decimals					

CONTENTS OF ERRORS

No.	Objectives	Domain	No.	Objectives	Domain
12⑨	Multiplying 3- by 1-Digit (R2)	1C	54⑧	**Subtracting Times in Minutes (R)**	3B
13⑩	Multiplying Two 2-Digits	1C			
14⑨	Multiplying 3- by 2-Digit	1C			
15⑧	(Multiple of 10)×(Whole)	1C			
18⑤	Dividing 2-Digit by 1-Digit (R)	1C			
19⑩	Dividing 3-Digit by 1-Digit (R)	1C			
20⑩	Dividing 4-Digit by 1-Digit	1C			
23⑧	Equivalent Fractions by Mult.	1D			
24⑥	Fractions in Lowest Terms	1C			
25②	Adding Two Like Fractions	1D			
26①	Adding Like Fractions (R)	1C			
27②	Adding Like Mixed Numbers (R)	1C			
28①	Subtracting Like Fractions	1C			
29⑧	Subtracting Like Mixed Numb.(R)	1C			
30⑧	Recognizing Decimals	1D			
37⑤	**Coordinates of Points (Wholes)**	**4B**			
39⑧	**Expanded Form of 4-, 5-Digit**	**1A**			
40⑧	Place Values of 1000ths	1C			
41①	Right Angle	2C			
42⑧	Isosceles Triangle	2C			
45⑧	Perimeter of Quadrilaterals	3C			
46⑩	Diameter	2D			
49⑥	Relation between m and km	3D			
51⑧	Relation between g and kg	3D			
52⑧	Relation between L and mL	3C			
53⑧	**Finding the Elapsed Time**	**3B**			

ANALYSIS BY DOMAINS

Learning Domain	Correct/ Total	Achievement(%)	Learning Domain	Correct/ Total	Achievement(%)
(1)Number & Operations	21/38	55	(4)Data Analysis & Probability	1/2	
(2)Geometry	3/6	50	(5)Letters & Expressions		
(3)Measurement	2/8	25	(6)Relations & Functions		
Total	27/54	50			

INDIVIDUAL PROGRESS PRESCRIPTION REPORT(II)

Name:Amanda Fricke **Member ID:36565**

ANALYSIS OF ERRORS

[Analysis By Objective] Identify the lacking skills and prescribe workbooks for improvement.

Objectives	Prescribed Workbooks
(Multiple of 10)×(Whole)(15⑧)	G03
Multiplying 3- by 1-Digit (R2)(12⑨), Multiplying Two 2-Digits(13⑩), Multiplying 3- by 2-Digit(14⑨)	G04-G05, G08-G10
Dividing 2-Digit by 1-Digit (R)(18⑤)	G12
Dividing 3-Digit by 1-Digit (R)(19⑩), Dividing 4-Digit by 1-Digit(20⑩)	G12-G15
Adding Two Like Fractions(25②), Subtracting Like Fractions(28①)	G20-G21
Equivalent Fractions by Mult.(23⑧), Fractions in Lowest Terms(24⑥)	G22-G23
Adding Like Fractions (R)(26①)	G24-G26
Adding Like Mixed Numbers (R)(27②), Subtracting Like Mixed Numb.(R)(29⑧)	G25-G27
Place Values of 1000ths(40⑧)	F33
Coordinates of Points (Wholes)(37⑤)	G34
Expanded Form of 4-, 5-Digit(39⑧)	F18
Right Angle(41①)	G32

[Analysis By Answer Selection] Identify the cause and rationale by analyzing the wrong answer selection.

Comments Of Errors	Type	Prescribed Workbooks
Added denominators together and numerators together, respectively.(25②,26①,27②)	AF 01	G21, G26
Confused the acute angle with a right angle.(41①)	AG 06	G16
Incorrect representation of an ordered pair corresponding to a point.(37⑤)	FG 01	G34
Subtracted denominators together and numerators together, respectively.(28①)	SF 01	G21

PRESCRIPTION PROGRAM

Week	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
1	F31	G02	G06	G10	G14	G18	G22	G26	G32	G-Rev.		
2	F32	G03	G07	G11	G15	G19	G23	G27	G33			
3	F33	G04	G08	G12	G16	G20	G24	G28	G34			
4	G01 ▼	G05	G09	G13	G17	G21	G25	G29	G-Ach.			

PROGRESS SCHEDULE

JUL	F31 : Telling time to the 1 minute, finding the elapsed time (hour, minute), converting time, recognizing AM, PM F32 : Place values (4d), comparing and counting numbers F33 : Place values (4d~6d), comparing and counting numbers G01 : Recognizing equal parts, understanding fractions and decimals, comparing fractions and decimals
AUG	G02 : Multiplication of a whole number by a multiple of ten G03 : (2d~6d)×(1d) (NR) G04 : (2d~6d)×(1d) (R1) G05 : (3d~5d)×(1d) (R2), multiplication of three whole numbers
SEP	G06 : Units of lengths (in., ft, yd, mi) G07 : Units of lengths (dm, cm, m, mm, km), conversion of units of lengths G08 : Multiplication of two multiples of ten, (2d, 3d)×(multiple of ten), (2d, 3d)×(2d) (NR), estimating products G09 : (2d, 3d)×(2d) (R1), estimating products

Diagnostic Test Level by Grade

Level	Math	English
A	Pre-K 3	K
B	Pre-K 4	1
C	K	2
D	1	3
E	2	4
F	3	5
G	4	6
H	5	7
I	6	8
J	Pre-Algebra	9
K	Algebra	
L	Geometry	

JEI Math

- Level A to Level L: Pre-K to 9th grade
- 1,374 specific study objectives in 403 weekly workbooks
- All 12 levels include Diagnostic test book, Prep workbook, and Review workbook
- Comprehensive curriculum covering all major domains of math:
  - Number & Operation
  - Geometry
  - Measurement
  - Data Analysis & Probability
  - Relation & Function
  - Letters & Expressions
- State standards aligned math curriculum

JEI Problem Solving Math

- Supplementary Program to JEI Math
- Improve analytical and problem solving skills
- 12 weekly workbooks per grade level from D – I
- Difficulty increases towards the end of each workbook
- No Diagnostic Tests
- Designed to provide advanced math students with a challenging program, and to build basic problem solving skills
- Features the Common Core type questions

Concept Pages

DP5 2b DATE NAME

A. Robert has 7 ones. Nicholas has 8 ones. They put all their ones together. What number do they make?

Robert: 

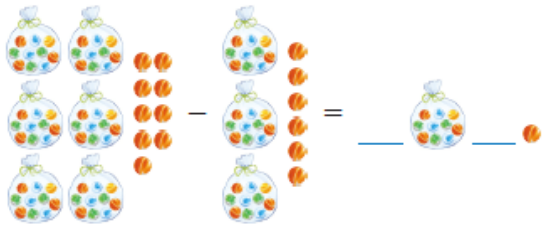
Nicholas: 

15 ones = ___ ten ___ ones

___ + ___ = ___

Answer: The number is _____.

B. Mr. Adams had 6 bags of sugarplums and 9 sugarplums. Each bag has 10 sugarplums. He gave 3 bags of sugarplums and 6 sugarplums to his children. How many pieces of sugarplums does he have now?



___ ___ ___

___ tens ___ ones

___ + ___ = ___

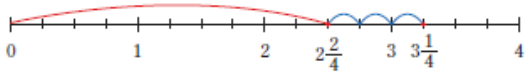
Answer: Mr. Adams has _____ pieces of sugarplums now.

HP4 2a DATE NAME

Julia already read $2\frac{1}{2}$ pages of her book during class. If she has to read up to $3\frac{1}{4}$ pages of the book for homework, how many more pages does she need to read?

A. Use the number line to solve the problem.

Step 1. Mark the fractions of the pages Julia already read and of the pages she needs to read for her homework on the number line:



$$2\frac{1}{2} = 2\frac{1\times 2}{2\times 2} = 2\frac{2}{4}$$

Step 2. Add the units in between two fractions: $\frac{1}{4}+\frac{1}{4}+\frac{1}{4}=$ ___

B. Use the subtraction sentence to solve the problem.

$$3\frac{1}{4} - 2\frac{1}{2} = 3\frac{1}{4} - 2\frac{\square}{4} = 2\frac{\square}{4} - 2\frac{\square}{4} = \_\_\_$$

Answer: Julia needs to read ___ more page of the book for her homework.

1. Complete the addition by filling in the boxes.

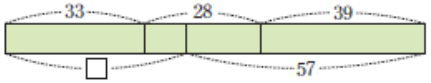
$$\frac{1}{2}+\frac{1}{4}+\frac{1}{8}+\frac{1}{16} = \frac{\square}{16}+\frac{\square}{16}+\frac{\square}{16}+\frac{\square}{16} = \frac{\square}{16}$$

Practice Pages

EP8 3a DATE NAME

1. Find the number for each □. Fill in the blanks.

(1)

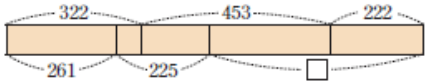


33 + 28 + 39 = □ + 57

_____ = □ + 57

□ = _____

(2)



_____ + _____ + _____ = _____ + _____ + □

_____ = _____ + □

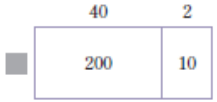
□ = _____

2. Randy had a bag of candy. He gave 17 pieces of candy to his friends and 16 to his sister. His uncle gave him 20 more pieces of candy. Now he has 25 pieces of candy in his bag. How many pieces of candy did Randy have in the beginning?

3. Eric bought 24 heads of lettuce a few days ago for his rabbits, Zig and Zag. He has 8 heads of lettuce left. If he gave the same number of heads of lettuce to each rabbit, how many did each rabbit get?

HP3 1b DATE NAME

1. Solve 210 ÷ ■ = 42 using an area model.

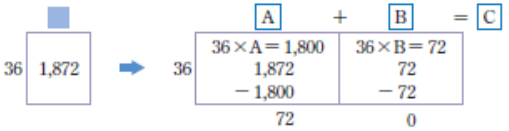


■ × 40 = 200 → ■ = _____

■ × 2 = 10 → ■ = _____

210 ÷ _____ = 42

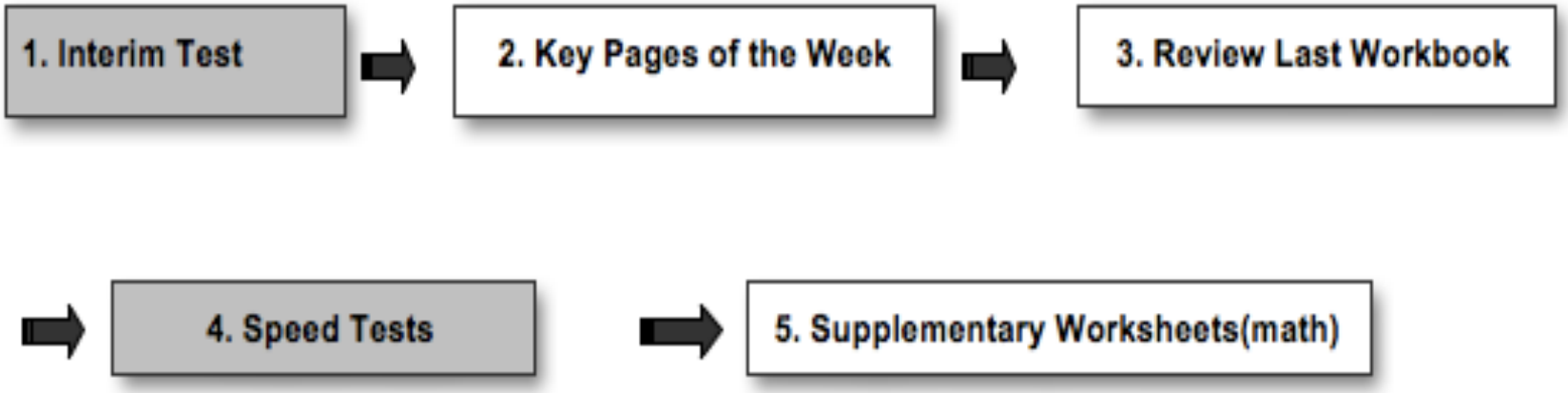
2. The area model below is drawn to solve the equation 1,872 ÷ 36 = ■. Fill in the blanks.



A = _____ B = _____ C = _____

1,872 ÷ 36 = _____

The 60-Minute Session Flowchart



The 60-Minute Session

Step 1: Interim Test

- Administer the Interim Test
- If a student scores less than 90%, offer supplementary worksheets and review previous workbook

Step 2: The Concept Pages

- Students should start with the concept pages in each new workbook
- Explain concept pages and review learning objectives verbally to facilitate ease of homework pages
- Record session contents, comments, and student difficulties in progress forms

The 60-Minute Session

Step 3: Checking up on Workbooks from the Previous Week

- Students should redo questions they answered incorrectly
- Instructors should check students' understanding of learning objectives
- Instructors should evaluate and comment on a student's work from previous week

The 60-Minute Session
If there is extra time…

Step 4: Supplementary Worksheets

- If there is extra time in a given session, and all previous steps have been completed, provide students with supplementary worksheets related to the concepts they have learned
  - JEI Math:
    - Speed Tests (Level E and F)
    - Supplemental Packets (7 page packets that correlate with most workbooks in level A through I)
    - Weekly Challenge (grades 1-8; found on Global)
  - JEI English:
    - Supplemental Packets (4 page packets that correlate with each workbook in Level A and B)
    - Writing Prompts (Level B through I)

Importance of Reviewing Workbook

Types of Workbook Review

a) Diagnostic Test Results Review (Math and English)
b) Reviews according to Interim Evaluation or Speed Test (Math) Results
c) Reviews determined by instructors and/or director

Main Reasons for Review

a) For Better Understanding
b) For Speed and Accuracy

3) Parent Consultation Before Review

JEI Program Overview

The 5 JEI Subjects:

1. **JEI Math**
2. **JEI Problem Solving Math**
3. **JEI English**
4. **JEI Reading & Writing / Writing Workshop**
5. **Test Prep (6^{th} Placement Test / 7^{TH} Placement Test/ Gate Program/ Math Competition Prep, etc)**

Test Prep (Only for La Canada location)

- 7TH Grade Placement Test (16 passed last year)
- 8TH Grade Placement Test (3 passed last year for both of 7th& 8th)
- Gate Program
- Math Competition Prep (Math Olympiad)
- Singapore Math Problem Solving Math
- Small Group/Advanced Homework Help Class for 6th to 8th

Placement Test Prep

- Two separate classes: 7th grade and 8th grade test prep
- For students who want to take placement test in May
- Regular class: for only 6th graders
- Advanced class: for 7th graders taking 8th grade class (for students who scored 80% and above in Pre-Algebra)

Math Olympiad

- Math competition for grades 4-8. Two divisions: 4-6 and 6-8
- Top math students from JEI are encouraged to attend the Math Olympiad prep class.
- Students will:
  - Learn competition rules
  - Practice problem solving math using competition rules
  - For every problem, students will state the problem, use a strategy, show the process, explain the solution, and then state the answer in a complete sentence
    → More info on: https://www.moems.org/contests.htm

Questions