

Slide One: Manager Monday Introductory Slide

- Manager Monday Title: Comprehensive Adult Student Assessment Systems (CASAS) Overview
- Presenter: Linda Taylor, CASAS, Director of Assessment Development, ltaylor@casas.org, 800-255-1036, ext. 186 and Jane Eguez, CASAS, Director of Program Development, jeguez@casas.org, 800-255-1036, ext. 125
- Date: February 18, 2019

Slide Two: Agenda

- About CASAS
 - Approved for use in Texas starting July 2019
- CASAS assessments – Reading, Listening, Math
- CASAS eTests and TOPSpro Enterprise software
- Training to use CASAS
- CASAS for Transition:
 - NEDP and Workforce Skills Certification
- Questions

Slide Three: About CASAS

- Non-profit organization started in 1980 to develop basic skills assessment for adult education programs
- National leader in adult basic education and adult ESL assessment
- Approved by US Dept. of Ed for NRS Reporting for ABE and ESL
- Used in 35 states and internationally
- Technical Manuals available

Slide Four: Integrated System Approach

- CASAS Competencies
- Basic Skills Content Standards
 - Reading, Listening and Math
- NRS-approved Assessments
 - Reading
 - Math
 - Listening
- Computer-delivered CASAS eTests and Paper
- New – Test on Chromebooks and iPads
- QuickSearch Online - Instructional Materials

- TOPSpro Enterprise software
 - Automatically scores tests
 - Produces student, class and agency level reports

Slide Five: About CASAS Assessments

- Measure academic skills in context of common life and work scenarios
- Group or individual administration -- practical for large and small programs
- eTests (computer-delivered):
 - Improves quality of assessment
 - Reduces staff time
 - Very affordable
- Re-usable test booklets -- cost-effective
- Free training on CASAS website
- Sample Test Items for test preparation available at no cost on CASAS website and in CASAS eTests

Slide Six: CASAS NRS-approved Assessments for ESL

NRS-approved through February 2021 (like all other NRS-approved ESL tests)

- Reading
 - Life and Work Reading (80 series)
 - Beginning Literacy, Forms 27 and 28 and
 - Reading for Language Arts (Forms 513/514)
- Listening
 - Life and Work Listening (980 series)

Slide Seven: CASAS NRS-approved Assessments for ABE

- Reading
 - CASAS Reading GOALS for ABE/ASE (900 series)
 1. NRS-approved through 2025
- Math
 - CASAS Math GOALS for ABE/ASE (900 series)
 1. Pending U.S. Department of Education approval
- CASAS does not have a Language test. It is not necessary to test Language if you use CASAS for ABE in Texas.

Slide Eight: New GOALS series – NRS approval status

- Reading GOALS approved for ABE/ASE through 2025
 - Math GOALS was submitted to OCTAE; CASAS hopes to hear soon about approval
 - Reading GOALS for ESL submitted October 1, 2018
 - Listening GOALS in development
- Strongly aligned with College and Career Readiness (CCR) Standards for Adult Education and the ELPS
 - Reading – assesses higher order thinking skills (Depth of Knowledge), complex informational text, and vocabulary, including academic language
 - Listening – assesses higher order thinking skills
 - Math – math concepts assessed in common life and work applications

Slide Nine: CASAS National Scale for ABE

- Equal interval scale determines
 - learner skill levels
 - learner gains
 - transition from ESL to ABE/ASE
- Accurate from Beginning Literacy to Advanced Adult Secondary
- Skill Level Descriptors to interpret test results

Slide Ten: Skill Level Descriptors

- The Skill Level Descriptors provide general information on how to interpret an adult learner's scale score with respect to the job-related and life skill tasks this person generally can accomplish.

Slide Eleven: WIOA Title II NRS/CASAS Levels

- Images of the Relationship to NRS Education Functioning Levels (EFLs) for ABE, ASE, and ESL/ELL for WIOA Title II tables.
- Agency testing information is reported to the federal government – Office of Vocational, Adult, and Training Education (OCTAE) via the state education office. This is the agency that grants the WIOA funding to each state. States report how many students are placed at each level and how many students complete an EFL (Educational Functioning Level) in OCTAE's National Reporting System (NRS). CASAS scale score ranges are aligned to the NRS EFLs.

Slide Twelve: WIOA Title I/CASAS Levels

- Image of the NRS Education Functioning Levels (EFLs) to CASAS Scale Scores and Grade Levels table.
- It's important that we know the definition of "Basic Skills Deficient" as we work with our other WIOA partners, including Title I agencies.

Slide Thirteen: Test Timing

To test in two modalities, it takes 2.5 – 3 hours.

- Intake
 - Short Locator (for each modality) --15 minutes – eTests only
 - Appraisal -- 30 minutes -- Paper (and eTests)
- Pre- and post-tests
 - New Reading GOALS for ABE/ASE
 - 1. 75 minutes each (60 minutes. for Level A)
 - New Math GOALS
 - 1. 60 minutes for Level A/B; 75 minutes for Level C/D
 - Life and Work Reading for ESL and ABE/ASE
 - Life and Work Listening (980 series) for ESL
 - 1. Pre- and post-tests -- 60 minutes each
- Administer post-test(s) after 70 - 100 hours of instruction but no less than 40 hours.

Slide Fourteen: The Assessment Process

- Place
 - Locator/Appraisal
 - 1. Identifies the Pretest students should take.
- Diagnose
 - Pre-Test
 - 1. Establishes a baseline score and diagnoses learning needs.
- Instruct
 - Informal Assessment
 - 1. Includes targeted instruction based on information from tests.
- Monitor
 - Post Test
 - 1. Given after 70-100 hours of instruction. Results compared to previous test to determine progress.

Slide Fifteen: CASAS Assessments: Levels and Forms

- Covers from Beginning Literacy to transition to post-secondary
- Two forms of each level test (e.g., Level A has Form 81 and Form 82).
- 82 is not a higher level test than 81. Both tests have the same level of difficulty.
- All forms are developed to national testing standards and are approved for NRS reporting.
- Forms are color-coded by level across all series.

Slide Sixteen: Test Administration Manuals

Essential for administering paper-based and computer-based tests

- A Test Administration Manual (TAM) contains:
 - answer keys
 - scoring guidelines
 - score conversion charts
 - next assigned test charts
 - competency and content standard content
 - class and student profiles
 - standardized test administration procedures and policies
 - test security protocols
 - resources for testing and instructional support

Slide Seventeen: New Test Series Content

CASAS new Reading Series Blueprint reflects:

- CASAS Competencies
- Content Standards
 - CASAS Reading Standards
 - CCR Standards for Adult Education in the areas of:
 1. Reading
 2. Reading Foundations
- Reading Task Areas
- Depth of Knowledge (DOK)

Slide Eighteen: What are CASAS Competencies?

- Competency Content Areas
 1. Basic Communication
 2. Consumer Economics
 3. Community Resources

4. Health
 5. Employment
 6. Government and Law
 7. Computation
 8. Learning to Learn
 9. Independent Living Skills
- CASAS Competencies are measurable learning objectives written in a functional life skills context.
 - CASAS tests use these competencies to ensure that test content is relevant and engaging for adult learners.

Slide Nineteen: Test Content Areas and Reporting Categories

CASAS Reading GOALS Content Areas and Their Corresponding CCRS Reading Anchor (CCRS Reading Standards R7, R9, and R10 are measured across content area)

- Vocabulary – R4
- Reading Comprehension Skills
 - Locate detail – R1
 - Main idea; Author's purpose – R2, R6
- Higher Order Reading Skills
 - Locate/compare details; Infer/draw conclusions – R1
 - Text structure and features – R5
 - Author's point of view – R6
 - Analyze claim/argument – R8

Slide Twenty: Depth of Knowledge (DOK)

- Describe levels of cognitive processing and higher-order thinking required in the College and Career Readiness Standards.
- Four DOK levels:
 1. Recall, Reproduction, Recitation
 2. Application of Skill/Concept
 3. Strategic Thinking
 4. Extended Thinking

Slide Twenty-One: Academic Word Lists

- The Academic Word List (AWL)
 - Developed by Averil Coxhead at the School of Linguistics and Applied Language Studies at Victoria University of Wellington, New Zealand.

- The list contains 570 word families which were selected because they appear with great frequency in a broad range of academic texts.
- The list does not include words that are in the most frequent 2000 words of English (the General Service List), thus making it specific to academic contexts.
- An alphabetized version is available online.
- CASAS used the AWL list for the GOALS Reading series.

Slide Twenty-Two: CASAS Sample Test Items

- Available at no cost at the [CASAS website](#)
- Reading -- Levels A – D
- Listening – Levels A – C, including audio files
- Use these sample test items to:
 - familiarize students with CASAS items
 - give students practice in taking a CASAS test
 - make future testing go more smoothly
 - help reduce student test-taking anxiety
- [CASAS Project Overview](#)

Slide Twenty-Three: Level C Reading Sample Test Item

Academic Vocabulary

- StarTech Employee Computer and Internet Policy
 - All StarTech employees have a computer Internet connection to use for company business. The company also has a liberal policy of giving employees up to 30 minutes of personal Internet use each day. However, communications on company computers belong to StarTech. The company can look at all messages and documents on its computers and other company technology.
- Which word means the same as liberal as used in this announcement?
 - Generous
 - Radical
 - Traditional
 - Widespread

Slide Twenty-Four: Level D Reading Sample Test Item

Infer/draw conclusions

- Lease vs. Buy: Read This Before Leasing or Buying a Car!

- Choosing between leasing or buying a car is one task in life that many individuals face. Some experts believe buying is the preferred choice because consumers have the freedom to sell the car at any time and are able to determine the asking price for themselves. Others respond that leasing is the better option because consumers often can select newer makes and models that may not be within their reach when purchasing a car. More importantly, leasing means lower monthly payments. Those who favor buying are quick to point out that payments never end with leasing, and after the endless payments, consumers have nothing to call their own.
- Which statement would make the best conclusion to this article?
 - A. Leasing the newest model beats owning an older one.
 - B. The decision depends on each person's situation.
 - C. It is obvious that leasing involves too many costs.
 - D. Most experts see little difference between leasing and buying.

Slide Twenty-Five: Life and Work Listening – 980 series

- Appropriate for all ESL levels
- CASAS test levels A – C
- Available via computer in CASAS eTests
- Features
 - Updated content and contexts, and more natural speech
 - Developed based on content standards and competencies
 - All aural - no reading (answer) options
 - Picture item type and test booklet at Level A only
 - Three item types per level
 - Repetition at Level A and in first two item types of Level B
 - Preview questions introduce the context of each question

Slide Twenty-Six: Math GOALS Series

Math GOALS Series was built to account for:

- CASAS Competencies
- Content Standards
 - CASAS Math Content Standards
 - CCR Standards for Adult Education
 1. Number Sense
 2. Algebra
 3. Geometry
 4. Measurement
 5. Statistical Reasoning

- NRS Educational Functioning Level (EFL) Descriptors for Math
- Math GOALS Series include skills used in academic and employment settings, as well as everyday life-skills.

Slide Twenty-Seven: Focus on Rigorous Standards

- Deeper understanding of key mathematical foundations, concepts, procedural fluency, and applications within and outside the classroom
- Coherent progressions within and across levels...build new understanding onto previous foundations
- Rigorous application of conceptual understanding, procedural skill, and application to real-world contexts...students employ concepts from several perspectives...know more than “how to get the answer.”
- In a nutshell, emphasis is now on:
 - “seeing the bigger picture”
 - knowing the meaning of answers (not just having numbers)
 - applying concepts to solve problems

Slide Twenty-Eight: New Math GOALS Features

- A range of item types is provided, including:
 - Word problems (reading complexity and cognitive load are consistent with level-specific expectations)
 - Simple to advanced calculation
 - Traditional academic contexts
 - Situational scenarios that reflect real-world applications
- Two forms at each level:
 - A/B Level (40 items each form)
 - C/D Level (38 items each form)
- Practice items will be available.
- Basic calculators are provided (online and by the site).
- Formulae are provided within the item presentation so that focus is on math concepts and skills, not memorization.
- Time to complete: 60 min. Level A/B; 75 min. Level C/D

Slide Twenty-Nine: Reporting Levels for Math GOALS Series

This slide has a table that shows the levels for Math GOALS series.

- Column One: NRS EFL Level
 - Row One: 1

- Row Two: 2
- Row Three: 3
- Row Four: 4
- Row Five: 5
- Row Six: 6
- Column Two: Beginning Literacy
 - Row One: Beginning Literacy
 - Row Two: Beginning Basic
 - Row Three: Low Intermediate
 - Row Four: Middle Intermediate
 - Row Five: High Intermediate
 - Row Six: Adult Secondary
- Column Three: NRS EFL Level Name
 - Row One: A
 - Row Two: B
 - Row Three: C
 - Row Four: D
 - Row Five: D
 - Row Six: E
- Column Four: Math GOALS Test Form A/B
 - Row One: Completed
 - Row Two: Completed
 - Row Three: Completed
 - Row Four: Entry Into L4
 - Row Five: N/A
 - Row Six: N/A
- Column Five: Math GOALS Test Form C/D
 - Row One: N/A
 - Row Two: N/A
 - Row Three: Completed
 - Row Four: Completed
 - Row Five: Completed
 - Row Six: Entry Into L6

Slide Thirty: CASAS Math GOALS BluSlieprint

This slide has a table that shows the CASAS math GOALS bluslieprint.

- Column One: CASAS Content Domains
 - Row One: M1 – Number Sense
 - Row Two: M2 – Algebra
 - Row Three: M3 – Geometry

- Row Four: M4 – Measurement (CCRS combines content areas M4: Measurement and M5: Statistics into one content domain: Measurement and Data)
- Row Five: M5 – Statistics and Probability
- Column Two: CASAS Level A/B
 - Row One: 29%
 - Row Two: 14%
 - Row Three: 10%
 - Row Four: 30%
 - Row Five: 18%
- Column Three: CASAS Level C/D
 - Row One: 16%
 - Row Two: 30%
 - Row Three: 11%
 - Row Four: 28%
 - Row Five: 16%
- Column Four: College and Career Readiness Standards (CCRS) Covered by CASAS Math Goals Series
 - Row One: At the A/B level, use basic concepts of number system, place values, operations of addition, subtraction, multiplication and division, fractions, fraction equivalents, ratios and proportions. At the C/D level, use advanced number concepts such as comparing fractions, using operations with rational numbers and exponents.
 - Row Two: At the A/B level, understand and reason with properties of four operations, explain patterns in four operations, solve basic one-variable equations. At the C/D level, generate equivalent equations and those with two or more variables, understand radicals, use lines and linear equations, use functions and functional expression, including inequalities, polynomials, quadratics, and exponential models.
 - Row Three: At the A/B level, identify and reason with shapes and their attributes in 2- and 3-dimensions, find area and volume. At the C/D level, solve problems of angle, area, congruence, similarity, trigonometry, volumes of cone, pyramids and spheres.
 - Row Four: At the A/B level, measure with standard units, time intervals, liquid masses and volumes, area, unit conversions, angle measurements. At the C/D level, understand/apply Pythagorean theorem, use volume measurements for complex modeling.
 - Row Five: At the A/B level, understand categories, identify relevant data in tables, represent data in graphs, understand variability, and describe distributions. At the C/D level, understand probability, sampling, draw inferences, summarize and interpret data categorical and quantitative data, draw inferences, investigate associations in bivariate data.

Slide Thirty-One: On-screen calculator in CASAS eTests

- Image of the on-screen calculator for the CASAS eTests.
- This is shown in the stem area of the screen.

Slide Thirty-Two: On-screen calculator in CASAS eTests

- Image of the on-screen calculator for the CASAS eTests.
- Calculator opens and can be moved to any position on the screen.
- Only basic functions are provided.

Slide Thirty-Three: CASAS Testing Requirements

- Computer-delivered tests
 - Computers
 - Internet access or agency-based server
 - Test Administration Manuals
 - By test series
 - By test type.
- Paper-based
 - Reusable test booklets
 1. By test series
 2. By form/level
 - Answer sheets
 - Test Administration Manuals
 1. By test series
 2. By test type.
 - Scanner/Staff to manually score

Slide Thirty-Four: CASAS eTests and TOPSpro Enterprise (TE)

- Images of the CASAS eTests website and the TOPSpro Enterprise website.

Slide Thirty-Five: Who is using eTests Online?

- Image of a map of the U.S. with states that use the eTests online in blue and the ones that don't in white.
- The states in white are:
 - Montana
 - Idaho

- Utah
- Wyoming
- North Dakota
- Missouri
- Mississippi
- Georgia
- South Carolina
- Vermont

Slide Thirty-Six: Advantages of using CASAS

- Hardware is affordable
 - Chromebooks available for around \$200
- Laptops, Chromebooks and iPads are mobile
 - Expands options to test outside a computer lab
- All CASAS assessments are available on eTests, including any new test series
- WTUs (Web Test Units) never expire
- Can use a combination of eTests and paper testing
 - For pre- and post-testing, or at different test sites

Slide Thirty-Seven: Advantages of using CASAS (Continued)

Accommodation features

- Enlarge text easily with touch screen
- Extra time (up to double time allowed)
 - Research shows this is sufficient
- Low vision considered in font, layout and color selection in reading passages and test items
- Free short Practice tests online

Slide Thirty-Eight: Features of “Basic” Online Implementation

- Individual Student Skills Profile
- Individual Student Competency Performance
- Personal Score Report (at end of test)
- Test History -- of all test takers
 - CASAS test form, test date, scale score, and scores outside of accuracy range
- Next Assigned Test
- Test Administrations -- # of tests given per month

- Export student test data to 3rd Party data system

Slide Thirty-Nine: Features of “Enhanced” Online Implementation (Continued)

- Student Level Class Reports (Content Standards, Competencies)
- Monitor program effectiveness
 - Class, Site and Agency Data Reports
 - Track clients in multiple programs
- Record instructional hours
- Drill-down: reports-to-data
- Customizable lists, Ad hoc reporting
- State and Federal accountability reporting (NRS Fed Tables)

Slide Forty: Easy eTests start-up process

- Complete free eTests Coordinator and Proctor Online Training Modules
- Complete free online CASAS Implementation Training
- Complete Online Implementation Agreement
- Use simple “Going Live” Checklist and other online resources to get started
- Call CASAS to purchase WTUs
- Free CASAS Tech Support available (Option 2)

Slide Forty-One: Reports for Students – Basic Online Implementation (1)

- Sample report displays a summary of the student’s results at the end of the test.
- Image of a sample report for an online eTest.

Slide Forty-Two: Targeting Instruction Using TE Reports

- Reports on test results give instructors valuable information to help their students.
- Reports show students’ strengths and weaknesses, and how to target instruction in:
 - Competencies
 - Content standards and
 - Task areas
- Go to the [CASAS website](#) and search on Key Reports to find the 10 most popular Instructional reports.

Slide Forty-Three: Reports for Students – Basic Online Implementation (2)

- Sample report displays competencies assessed in listening and reading
- Image of an Individual Skills Profile.

Slide Forty-Four: Reports for Students – Basic Online Implementation (3)

- Sample shows test results by displaying the competency number and statement for each test item and if the student correctly answered the item.
- Image of a Student Performance chart.

Slide Forty-Five: Class Reports for Teachers – Enhanced Online Implementation

- Sample report displays the competency number per test item and student item responses sorted by percentage correct.
- Image of a Class Performance chart.

Slide Forty-Six: Reports for Teachers and Testers – Enhanced

- Sample report displays every student who took a test and the test history for each student.
- Image of a Student Test Summary.

Slide Forty-Seven: Reports for Teachers and Testers – Basic

- Sample report displays the last test taken by a student and the next test assigned to the student within a test series.
- Image of a Next Assigned Test page.

Slide Forty-Eight: Reports for Teachers – Enhanced Online Implementation

- Database screenshot displays instructional hours recorded for daily attendance.
- Image of a Class Instance Information chart.

Slide Forty-Nine: Reports for Administrators – Enhanced

- This report is designed to show, by Class, the average gains (or setbacks) achieved between the scale scores of the First and the Last tests taken (not necessarily highest) within a defined period.
- Image of a Learning Gains Comparison – First to Last chart.

Slide Fifty: Reports for Administration – Enhanced (Continued)

- Sample report displays students missing essential data needed to comply with state and federal mandates.
- Image of a Data Integrity Detail chart.

Slide Fifty-One: Initial Implementation

- Select skill area(s) to be assessed (e.g., reading, math, listening)
- CASAS Training is required before implementation.
 - Select training option:
 1. State or agency-sponsored face-to-face training by a CASAS Certified Trainer
 2. Distance Training – free online module for Initial Training
 3. CASAS Summer Institute
- eTests Training -- free online modules
 - Coordinator Training
 - Proctor Training
 - Complete Online Implementation Agreement

Slide Fifty-Two: Paper Testing

- Complete Initial Training – online or face-to-face
- Purchase test materials
 - Appraisal test booklets
 - Progress test booklets – sets of 5, 10 and 25 per test form in a series
 - Scannable answer sheets
 - Test Administration Manual
- Scanning option to upload to TOPSpro Online
 - Can generate student and administrative reports

Slide Fifty-Three: Focus on Transitions

- Using CASAS for transition

- National External Diploma Program – NEDP
- Workforce Skills Certification System – WSCS
- CASAS and the new HSE Correlation Studies
- Transition to postsecondary education and training

Slide Fifty-Four: National External Diploma Program

- In approximately 84 agencies in 8 states
- Web delivered
- Awards local or state-level high school diploma
- Competencies and Performance Indicators aligned with Common Core State Standards
 - Health Literacy
 - Civic Literacy and Community Participation
 - Consumer Awareness and Financial Literacy
 - 21st Century Workplace Science
 - Geography and History
 - Cultural Literacy Communications
 - Media Literacy, Math, and Technology assessed in context

Slide Fifty-Five: Workforce Skills Certification System (WSCS)

- Assess and profile = certify work readiness skills
- Connect workforce, education, vocational training, voc. rehab, and local businesses
- Meet local labor market needs
- Enhance career pathway programs
- Foundation (Basic) Skills and Soft (Behavioral) Skills go on the Workforce Skills Profile.

Slide Fifty-Six: Targeting Instruction

- Use these resources:
 - QuickSearch Online
 - CASAS Competencies
 1. {Test series} Competency Content
 2. (Refer to sample on pages 11 & 12 in Activity Packet)
 - CASAS Content Standards
 1. Aligned with College and Career Readiness
 2. Standards for Adult Education

Slide Fifty-Seven: QuickSearch Online

- QuickSearch software provides an essential link between assessment and instruction in the CASAS system
 - Available Online at no cost
 - Helps select materials that match curriculum
 - Provides quick, easy access to a database of more than 2,000 instructional materials
 - Is correlated to more than 300 CASAS Competencies and content standards
- Includes print, audio, video, and software materials
- Is updated continuously

Slide Fifty-Eight: [CASAS Website](#)

- Register! A great resource for training and professional development.

Slide Fifty-Nine: CASAS/HSE Studies

- CASAS is conducting cooperative studies with:
 - GED Testing Service and ETS HiSET
 - Studies in process
 - Will provide programs with information about an adult learner's performance on CASAS reading and math assessments and their readiness to take either the GED or the HiSET
- States and local programs interested in being a part of this study should contact CASAS

Slide Sixty: Field Testing!

- Item field testing and research studies for new Listening GOALS series
- Cooperative studies with GED Testing Service and ETS HiSET for new Reading GOALS and Math GOALS test series
- To participate in CASAS field testing and research studies, send an email to: fieldtesting@casas.org
- Or contact Karen Burger (kburger@casas.org)

Slide Sixty-One: Join us at the 2019 CASAS Summer Institute

- When?

- June 11 - 13, 2019
- Where?
 - Hyatt Regency, Orange County, CA

Slide Sixty-Two: Contacts

- CASAS Office in San Diego -- 800-255-1036
- Tech Support press option 2 from 9 am to 8 pm (ET)
- To get started with CASAS eTests:
 - Elizabeth Scheib – escheib@casas.org
 - Martha Gustafson – mgustafson@casas.org

Slide Sixty-Three: Math GOALS

- Math Sample Test Items

Slide Sixty-Four: Domain – Number Sense

- CASAS Content Domain: M1 – Number Sense
- CASAS Level A/B: 29%
- CASAS Level C/D: 16%
- College and Career Readiness Standards Included in CASAS Math GOALS Series: At the A/B level, use basic concepts of number system, place values, operations of addition, subtraction, multiplication and division, fractions, fraction equivalents, ratios and proportions. At the C/D level, use advanced number concepts such as comparing fractions, using operations with rational numbers and exponents.

Slide Sixty-Five: Sample – Level A/B, Number Sense

Number Sense (M1.1.12, Use fractions and their decimal equivalents...)

- Gina is working as a cashier and the state sales tax rate is 7.25%. How much is the tax for a purchase of \$8.50?
 - 6¢
 - 7¢
 - 62¢
 - 75¢
- (Answer: 62)

Slide Sixty-Six: Sample – Level C/D, Number Sense

Number Sense (M1.3.16, Use exponential notation to indicate repeated multiplication...)

- Franco's customer is buying a rug that measures 8 feet by 8 feet. The cost is determined by the square foot. How will he compute the number of square feet?
 - $8 \div 8$
 - Square root of 8
 - 8 squared
 - $8 + 8$
- (Answer: 8 squared)

Slide Sixty-Seven: Domain – Algebra

- CASAS Content Domain: M2 – Algebra
- CASAS Level A/B: 14%
- CASAS Level C/D: 30%
- College and Career Readiness Standards Included in CASAS Math GOALS Series: At the A/B level, understand and reason with properties of four operations, explain patterns in four operations, solve basic one-variable equations. At the C/D level, generate equivalent equations and those with two or more variables, understand radicals, use lines and linear equations, use functions and functional expression, including inequalities, polynomials, quadratics, and exponential models.

Slide Sixty-Eight: Sample - Level A/B, Algebra

Algebra (M2.2.8, Solve simple one-step equations with unknowns.)

- The original plans for banners showed the width to be 4 feet. The customer now wants all banners to be 9 feet wide.
- If X is the amount to add to the width and $4 + X = 9$, how much should be added to the width?
 - 2 feet
 - 5 feet
 - 9 feet
 - 13 feet
- (Answer: 5 feet)

Slide Sixty-Nine: Sample – Level C/D, Algebra

Algebra (M2.3.10, Write the equation of a line given 2 points....)

- Which equation (A-D) represents the slope (m) of the line in the Travel Rate graph?
 - $m = y_2 - y_1/x_2 - x_1$
 - $m = x_2 - x_1/y_2 - y_1$
 - $m = (y_2 - y_1) - (x_2 - x_1)$
 - $m = (y_2 - y_1) + (x_2 - x_1)$
- (Answer: $m = y_2 - y_1/x_2 - x_1$)

Slide Seventy: Domain – Geometry

- CASAS Content Domain: M3 – Geometry
- CASAS Level A/B: 10%
- CASAS Level C/D: 11%
- College and Career Readiness Standards Included in CASAS Math GOALS Series: At the A/B level, identify and reason with shapes and their attributes in 2- and 3-dimensions, find area and volume. At the C/D level, solve problems of angle, area, congruence, similarity, trigonometry, volumes of cone, pyramids and spheres.

Slide Seventy-One: Sample – Level A/B, Geometry

Geometry (M3.2.1, Identify parallel, perpendicular, and intersecting lines). A calculator is not needed for this item.

- Which best describes Line QR and Line ST?
 - They are equal in length.
 - They are intersecting lines.
 - They are parallel lines.
 - They are perpendicular lines.
- (Answer: They are parallel lines)

Slide Seventy-Two: Sample – Level C/D, Geometry

Geometry (M3.2.3: Describe characteristics of angles formed by a transversal intersecting parallel lines.)

- The city engineer's plans show that Maple Street intersects 4th and 5th Avenues at a 45 degree angle (A). What is the measure of angle B?
 - 45 degrees
 - 135 degrees
 - 270 degrees
 - 315 degrees

- (Answer: 135 degrees)

Slide Seventy-Three: Domain – Measurement

- CASAS Content Domain: M4 – Measurement (CCRS combines content areas M4: Measurement and M5: Statistics into one content domain: Measurement and Data)
- CASAS Level A/B: 30%
- CASAS Level C/D: 28%
- College and Career Readiness Standards Included in CASAS Math GOALS Series: At the A/B level, measure with standard units, time intervals, liquid masses and volumes, area, unit conversions, angle measurements. At the C/D level, understand/apply Pythagorean theorem, use volume measurements for complex modeling.

Slide Seventy-Four: Sample – Level A/B, Measurement

Measurement (M4.2.1, Calculate with and convert between customary US units of linear measurement).

- The perimeter of Bernardo's garden is 144 inches. The decorative edging he wants to use to enclose it is sold by the whole foot only. How much edging should he order so that no edging is left over?
 - 8 feet
 - 10 feet
 - 12 feet
 - 14 feet
- (Answer: 12 feet)

Slide Seventy-Five: Sample – Level C/D, Measurement

Measurement (M4.3.4, Calculate area of rectangles and other common figures, using a given formula). Measurement (M4.3.7, Calculate area or volume of irregular or composite shapes by dividing the figure into parts). A calculator will be provided/allowed.

- How much gravel must be ordered to cover the entire rock garden shown?
 - 328.81 ft
 - 164.41 ft
 - 328.81 sq ft
 - 164.41 sq ft
- (Answer: 164.41 sq ft)

Slide Seventy-Six: Domain – Statistics and Probability

- CASAS Content Domain: M5 – Statistics and Probability (CCRS combines content areas M4: Measurement and M5: Statistics into one content domain: Measurement and Data)
- CASAS Level A/B: 18%
- CASAS Level C/D: 16%
- College and Career Readiness Standards Included in CASAS Math GOALS Series: At the A/B level, understand categories, identify relevant data in tables, represent data in graphs, understand variability, and describe distributions. At the C/D level, understand probability, sampling, draw inferences, summarize and interpret data categorical and quantitative data, draw inferences, investigate associations in bivariate data.

Slide Seventy-Seven: Sample – Level A/B, Statistics and Data

Level A/B, Statistics (M5.1.1, ...extract relevant data in lists, tables, and charts.) This is a simple statistics item...requires only that information be read from chart.

- According to the graph, about how many people ate at The Lunch Cart on Tuesday?
 - 6
 - 30
 - 35
 - 60
- (Answer: 35)

Slide Seventy-Eight: Sample – Level C/D, Statistics and Data

LEVEL C/D, Statistics – (M5.2.3, Find summary statistics of a data set...and determine how extreme values affect each of them.) This is more difficult. It tests the concept of data distribution...student must understand the effects that extreme data have on measures of central tendency. No data or calculations are needed to respond correctly.

- Elise's boss asked her to prepare a report of monthly sales over a 2-year period. Realizing that sales in some months could have been unduly influenced by seasonal events, which statistic should she graph to give the most accurate view of monthly sales?
 - the total sales for each of the 24 months
 - the mean (average) sales for each of the 24 months
 - the total sales for each year
 - the median sales for each of the 24 months

- (Answer: the median sales for each of the 24 months)