The Kaufman Test of Educational Achievement, Second Edition (KTEA-II) is an individually administered measure of academic achievement.
Score Summary Table
Grade Norms: Fall, Grade 8

<table>
<thead>
<tr>
<th>Subtest</th>
<th>Raw Score</th>
<th>Standard Scores</th>
<th>90% Confidence Interval</th>
<th>Percentile Rank</th>
<th>Descriptive Category</th>
<th>Grade Equivalent</th>
<th>GSV</th>
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<tbody>
<tr>
<td><strong>Comprehensive Achievement Composite</strong></td>
<td>400</td>
<td>63</td>
<td>59–67</td>
<td>1</td>
<td>Lower extreme</td>
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<tr>
<td><strong>Reading Composite</strong></td>
<td>128</td>
<td>64</td>
<td>58–70</td>
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<td>Lower extreme</td>
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<tr>
<td>Letter &amp; Word Recognition</td>
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<td>47–57</td>
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<td>Lower extreme</td>
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<tr>
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<td><strong>Math Composite</strong></td>
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<td>Math Concepts &amp; Applications</td>
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<td>43</td>
<td>37–49</td>
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<td>Lower extreme</td>
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<td>Math Computation</td>
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<td>93–103</td>
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<td>Average</td>
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<td><strong>Written Language Composite</strong></td>
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<td>57–69</td>
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<tr>
<td>Written Expression</td>
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<td>44</td>
<td>34–54</td>
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<td>Spelling</td>
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<td>53–73</td>
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<tr>
<td>Listening Comprehension</td>
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<td><strong>Sound-symbol Composite</strong></td>
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<td>Nonsense Word Decoding</td>
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<td>103</td>
<td>97–109</td>
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<td><strong>Decoding Composite</strong></td>
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<td>Word Recognition Fluency</td>
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<td>78</td>
<td>69–87</td>
<td>7</td>
<td>Below average</td>
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<tr>
<td>Decoding Fluency</td>
<td>35</td>
<td>109</td>
<td>101–117</td>
<td>73</td>
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<td><strong>Oral Fluency Composite</strong></td>
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<td>116</td>
<td>107–125</td>
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<tr>
<td>Associational Fluency</td>
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<td>108</td>
<td>96–120</td>
<td>70</td>
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<tr>
<td>Naming Facility (RAN)</td>
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<td>120</td>
<td>111–129</td>
<td>91</td>
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</table>

*The Decoding Composite is based on the sum of standard scores of Letter & Word Recognition and Nonsense Word Decoding.
## Error Analysis Summary Table

**Grade Norms: Fall, Grade 8**

<table>
<thead>
<tr>
<th>Letter &amp; Word Recognition</th>
<th>Nonsense Word Decoding</th>
<th>Spelling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last Item Administered: 60</td>
<td>Last Item Administered: 50</td>
<td>Last Item Administered: 60</td>
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</tbody>
</table>

### Items Attempted | Average # of Errors | Student's # of Errors | Skill Status | Items Attempted | Average # of Errors | Student's # of Errors | Skill Status | Items Attempted | Average # of Errors | Student's # of Errors | Skill Status |
<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
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<tbody>
<tr>
<td>Single/Double Consonant</td>
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<td>Weakness</td>
<td>37</td>
<td>0–2</td>
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<td>Weakness</td>
<td>53</td>
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<td>Initial Blend</td>
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<td>Weakness</td>
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<td>3</td>
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<tr>
<td>Medial/Final Blend</td>
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<td>0</td>
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<td>Wrong Vowel</td>
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<td>Short Vowel</td>
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<td>Weakness</td>
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<td>0–2</td>
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<td>Weakness</td>
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<td>0–1</td>
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<td>Weakness</td>
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<td>Weakness</td>
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<td>Vowel Team/Diphthong</td>
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<td>3</td>
<td>Weakness</td>
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<td>R–controlled Vowel</td>
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<td>Weakness</td>
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<td>0–1</td>
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<td>Silent Letter</td>
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<td>0–1</td>
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<td>Weakness</td>
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<td>Weakness</td>
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<tr>
<td>Prefix/Word Beginning &amp; Suffix/Inflection</td>
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<td>0</td>
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<td>Weakness</td>
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<td>Suffix/Inflection</td>
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<td>Weakness</td>
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<tr>
<td>Hard/Soft C G S</td>
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<td>Unpredictable Pattern</td>
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<td>Initial/Final Sound</td>
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<td>Weakness</td>
<td>56</td>
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<td>Insertion/Omission</td>
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<td>Non–phonetic</td>
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<td>Weakness</td>
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<td>Misordered Sounds</td>
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Blank fields indicate that there is no score available for a skill/error category.
### Reading Comprehension

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<tbody>
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<td>Items Attempted</td>
<td>Average # of Errors</td>
<td>Student's # of Errors</td>
<td>Skill Status</td>
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<tr>
<td>Literal Comprehension</td>
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<td>0–1</td>
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<tr>
<td>Inferential Comprehension</td>
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<td>0–3</td>
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### Listening Comprehension

### Oral Expression

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<td>Structure</td>
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<td>Word Form</td>
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<td>Word Meaning</td>
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Blank fields indicate that there is no score available for a skill/error category.
<table>
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<tr>
<th>Math Concepts &amp; Applications</th>
<th>Math Computation</th>
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<td>Ceiling Item: 80</td>
<td>Last Item Administered: 70</td>
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<td>Items Attempted</td>
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<tr>
<td>Number Concepts</td>
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<td>Addition</td>
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<td>Subtraction</td>
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<td>Multiplication</td>
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<td>Division</td>
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<td>Tables and Graphs</td>
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<td>Time and Money</td>
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<td>Advanced Operations</td>
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<td>Multi–step Problems</td>
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<td>Word Problems</td>
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<td>Exponents or Roots</td>
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<td>Algebra</td>
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<td>Wrong Operation</td>
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<td>Fact or Computation</td>
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<td>Regrouping: Subtraction</td>
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<tr>
<td>Subtract Smaller from Larger</td>
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<td>Add or Subtract Numerator &amp; Denominator</td>
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<td>Multiply/Divide Fractions</td>
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<td>Mixed Numbers</td>
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<td>Incorrect Sign</td>
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Blank fields indicate that there is no score available for a skill/error category.
N/A indicates that there is no error analysis information available for this skill/error category at this level.
MARISA's responses on the following subtest(s) were further examined to identify possible specific skill strengths and/or weaknesses. First, her errors on each subtest were totaled according to skill/error categories. Then the number of errors MARISA made in each skill/error category was compared with the average number of errors made by the standardization sample students at the same grade level who attempted the same items. As a result, MARISA's performance in each skill/error category could be rated as strong, average, or weak. The diagnostic information obtained from MARISA's error analysis is summarized below.

As you read these results, keep in mind that error analysis is most effective for students who obtained standard scores of 100 or below. For students who obtain standard scores above 110, extreme caution should be used in the interpretation of skill/error categories identified as weaknesses. See the KTEA–II ASSIST manual for a detailed explanation of how to interpret error analysis strengths and weaknesses.

**Letter & Word Recognition**

No strengths were identified for MARISA.

The following skill/error categories were identified as weaknesses for MARISA:

- **Single/Double Consonant**: Individual consonants or doubled consonants that make a single sound. Examples: open, bulletin.
- **Short Vowel**: A vowel in a closed syllable that makes the short vowel sound. Examples: it, went.
- **Suffix/Inflection**: Common suffixes, word endings, and inflections representing the last morphological unit of a word. Examples: relation, extension, likeable, shoes, shopped, smelling.
No strengths were identified for MARISA.

The following skill/error categories were identified as weaknesses for MARISA:

Single/Double Consonant: Individual consonants, or doubled consonants that make a single sound. Examples: mab, zid.

Initial Blend: Two or three consonants whose sounds blend together at the beginning of a word. Examples: plewness, sprewful.

Medial/Final Blend: Two or three consonants whose sounds blend together in the middle or at the end of a word. Examples: hapt, blirping.

Consonant Digraph: Two consonants that together make one sound. Examples: chept, phrimb.

Wrong Vowel: Errors resulting from the pronunciation of a vowel sound that does not correspond to the correct pronunciation of the printed vowel. Examples: snape for snope, hub for hube. [NOTE: A Strength in the Wrong Vowel Category means incorrect pronunciations of vowels did not occur or occurred less frequently than typical for students who took the same items.]

Short Vowel: A vowel in a closed syllable that makes the short vowel sound. Examples: dompest, vapt.

Long Vowel: A vowel in an open syllable or a syllable controlled by a silent–e that makes the long vowel sound. Examples: trame, ko.

R–controlled Vowel: The sound made by a vowel when the letter r forces the preceding vowel to change its sound. Examples: twirdling, slortion.

Silent Letter: A letter that is not voiced in the pronunciation of a word. This includes a silent consonant in a consonant pair and a final e. Examples: sulfemn, frumb, clobe.

Initial/Final Sound: Responses that include mispronunciations of the first or last sounds of stimulus words. Examples: hach for hapt, thrumb for frumb.

Insertion/Omission: Responses that either omit or add syllables or other sound units to stimulus words. Examples: impannerous for impananeous, adound for adrounded.

Misordered Sounds: Responses that transpose sounds within stimulus words. Examples: tarm for trame, ushney for unshey.
No strengths were identified for MARISA.

The following skill/error categories were identified as weaknesses for MARISA:

Single/Double Consonant: Individual consonant letters or doubled consonant letters that represent a single sound. Examples: cat, dressing.

Initial Blend: Two or three consonant letters that represent sounds blended together at the beginning of a word. Examples: splitting, drove.

Medial/Final Blend: Two or three consonant letters that represent sounds blended together in the middle or at the end of a word. Examples: roasted, wind.

Consonant Digraph: Two consonant letters that represent one sound. Examples: phone, when.

Short Vowel: The letter that represents a vowel in a closed syllable that makes the short vowel sound. Examples: went, frog.

Long Vowel: The letter that represents a vowel in an open syllable or a syllable controlled by a silent–e that makes the long vowel sound. Examples: he, drove.

Vowel Team/Diphthong: The letters that represent a pair of vowels that makes one sound. Examples: toasted, trained. The term diphthong refers to the specific sound represented by vowel letter pairs when gliding or changing continuously from one vowel sound to another in the same syllable. Examples: the /oy/ sound made by "oi" (spoiled) and the /ow/ sound made by "ou" (doubt).

R–controlled Vowel: The letter that represents the sound made by a vowel when the letter r forces the preceding vowel to change its sound. Examples: farm, hurried.

Silent Letter: A letters that does not represent a voiced sound in the pronunciation of a word. This includes a silent consonant in a consonant pair and a final e. Examples: known, shade.

Prefix/Word Beginning: The spellings of common prefixes (e.g., unwelcome, insert,) and Greek and Latin morphemes used as word beginnings (e.g., consensus, telegraph, hemisphere).

Suffix/Inflection: The spellings of common suffixes, word endings, and inflections representing the last morphological unit of a word. Examples: relation, extension, likeable, shoes, shopped, smelling.

Hard/Soft C G S: The alternate spellings (hard and soft) of the consonants c (e.g., hard as in cat or soft as in cent), g (e.g., hard as in goat, soft as in germ), and s (e.g., hard as in rings or soft as in senses).

Insertion/Omission: Responses that either omit or add letters to stimulus words. Examples: gentiley for gently, traind for trained.

Non–phonetic: Responses that do not fully correspond to the typical sound–to–letter correspondences. Examples: thlm for play, choded for toasted.
Reading Comprehension

No strengths were identified for MARISA.

The following skill/error categories were identified as weaknesses for MARISA:

Literal Comprehension: Answers to comprehension questions require the reader to identify the author's intent or purpose; to identify characters’ actions, beliefs, thoughts, intentions, feelings, or emotions; or to locate factual information, definitions and terms, or characteristics describing concepts when this information is clearly and explicitly stated in the passage.

Inferential Comprehension: Answers to comprehension questions require the reader to infer actions, beliefs, thoughts, intentions, feelings, or emotions experienced by specific characters; to infer the main idea; to ascertain the author's intent or purpose when not directly stated in the passage; to identify the subjects or objects of pronouns or indirect references in a passage; or to apply a definition presented in a passage to a new situation.

Listening Comprehension

No strengths were identified for MARISA.

No weaknesses were identified for MARISA.

Oral Expression

No strengths were identified for MARISA.

The following skill/error categories were identified as weaknesses for MARISA:

Task: The ability to express thoughts and ideas that generally satisfy the task demands.

Structure: The ability to express thoughts and ideas in well-structured sentences.

Word Form: The ability to use grammatically correct word forms in oral communication.

Word Meaning: The ability to use words in oral communication according to their correct meaning.
No strengths were identified for MARISA.

The following skill/error categories were identified as weaknesses for MARISA:

Number Concepts: Problems requiring the understanding and use of concepts such as size, number recognition, number naming, counting, numeration, one-to-one correspondence, seriation, number lines, place value, and prime number.

Addition: Problems requiring the ability to use basic addition facts or addition algorithms to find solutions.

Subtraction: Problems requiring the use of basic subtraction facts or subtraction algorithms to find solutions.

Multiplication: Problems requiring the use of basic multiplication facts or multiplication algorithms to find solutions.

Division: Problems requiring the use of basic division facts or division algorithms to find solutions.

Tables and Graphs: Problems requiring the ability to view and answer questions about information presented in table or graph form.

Time and Money: Problems requiring the ability to tell time using analog clocks and calendars, use time schedules to find trip times, identify coin values, add coin values, multiply amounts, and make change.

Measurement: Problems requiring the ability to identify and understand units of measurement, convert quantities from one measurement unit to another, and calculate areas.

Fractions: Problems requiring the addition, subtraction, multiplication, or division of fractional amounts to find solutions.

Multi-step Problems: Problems requiring the application of two or more math operations or procedures to derive an answer.

Word Problems: Problems that are stated in a narrative form without any pictures, graphs, or equations to assist with quantitative reasoning.
No strengths were identified for MARISA.

The following skill/error categories were identified as weaknesses for MARISA:

**Addition:** Problems requiring knowledge of basic addition facts and/or knowledge of regrouping involving redistribution in the ones, tens, hundreds, or thousands columns to perform addition computations.

**Subtraction:** Problems requiring basic knowledge of basic subtraction facts and/or knowledge of regrouping involving redistribution in the ones, tens, hundreds, or thousands columns to perform subtraction computations.

**Division:** Problems requiring knowledge of basic division facts and/or knowledge of how to use division algorithms to obtain quotients.

**Decimals and Percents:** Problems requiring knowledge of decimal place values and how to add, subtract, multiply, and divide decimal numbers to complete computation problems.

**Wrong Operation:** Errors that are the result of using the wrong operation to perform a computation.

**Fact or Computation:** Errors that are the result of incorrect use of basic fact knowledge and/or errors in completing computations despite evidence of the selection of correct operations, algorithms, or procedures for solving the problem.

**Regrouping:** Subtraction: Errors that are the result of a lack or misuse of knowledge of regrouping involving redistribution in the ones, tens, hundreds, or thousands columns when performing subtraction computations.

**Subtract Smaller from Larger:** Errors that are the result of subtracting a larger number from a smaller number instead of using regrouping when performing subtraction computations.

**Add or Subtract Numerator & Denominator:** Errors that are the result of incorrectly adding or subtracting numerator or denominator terms when performing computations with fractions.

**Equivalent Fraction/Common Denominator:** Errors that are the result of a lack or misuse of knowledge of common denominators or fraction equivalents when performing computations.

**Multiply/Divide Fractions:** Errors that are the result of incorrectly multiplying or dividing fractions when performing computations.

**Mixed Numbers:** Errors that are the result of a lack or misuse of knowledge of how to convert mixed numbers when performing computations with mixed numbers.

**Incorrect Sign:** Errors that are the result of using the wrong operation due to incorrectly identifying the operation sign when performing computations.
Comparison of Letter & Word Recognition, Nonsense Word Decoding and Spelling

No common areas of strength were identified among the subtest error analyses.

10 common areas of weakness were identified among the subtest error analyses:
- Single/Double Consonant
- Initial Blend
- Medial/Final Blend
- Consonant Digraph
- Short Vowel
- Long Vowel
- R–controlled Vowel
- Silent Letter
- Suffix/Inflection
- Insertion/Omission

Comparison of Reading Comprehension and Listening Comprehension

No common areas of strength were identified among the subtest error analyses.

No common areas of weakness were identified among the subtest error analyses.

Comparison of Math Concepts & Applications and Math Computation

No common areas of strength were identified among the subtest error analyses.

3 common areas of weakness were identified among the subtest error analyses:
- Addition
- Subtraction
- Division
Errror Analysis Teaching Objectives and Interventions
Grade Norms: Fall, Grade 8

Letter & Word Recognition

Teaching Objectives

Single/Double Consonant

1. Upon request, the student will pronounce the sound(s) made by each consonant letter of the alphabet.

2. Given a list of ___ words containing ___ different single and/or double consonants, the student will read each word with no more than ___ single and/or double consonant errors.

3. Given a reading passage, the student will read the passage with no more than ___ single and/or double consonant errors.

Short Vowel*

1. Upon request, the student will pronounce the short vowel sound for each of the vowels (a, e, i, o, u, and y).

2. Given a list of ___ one–syllable words containing ___ short vowel sounds, the student will pronounce the words with no more than ___ short vowel errors.

3. Given a list of ___ multi–syllable words containing ___ short vowel sounds, the student will pronounce the words with no more than ___ short vowel errors.

4. Given a reading passage where ___ of the words contain ___ different short vowel sounds, the student will read the passage with no more than ___ short vowel sound errors.

* The objectives for this error category address only words where the short vowel sound is represented by one letter. See the Vowel Team/Diphthong Error Category for objectives that address short vowel sounds represented by vowel teams.

Suffix/Inflection*

1. Given a list of ___ suffixes/inflections, the student will pronounce each with no more than ___ errors.

2. Given a list of ___ words containing ___ different suffixes/inflections, the student will identify the suffixes/inflected word endings, and pronounce the words with no more than ___ suffix/inflection errors.

3. Given a reading passage where ___ of the words contain ___ different suffixes/inflections, the student will read the passage with no more than ___ suffix/inflection errors.

4. Given a list of ___ consonant–le patterns, the student will pronounce each with no more than ___ errors.

5. Given a list of ___ words containing ___ different consonant–le patterns, the student will identify the consonant–le patterns and pronounce the words with no more than ___ suffix/inflection errors.
6. Given a reading passage where ___ of the words contain ___ different consonant–le patterns, the student will read the passage with no more than ___ suffix/inflection errors.

* These objectives include words that have the consonant–le pattern, which can be considered a distinct type of suffix/inflection.

**Interventions**

All Skills

(Note: These interventions can be adapted to address all skill/error categories and objectives.)

For younger students:

1. Write the student's name, and ask him or her to sound out each letter.

2. Write a list of all the names of the members of the student's class, and ask him or her to sound out each consonant.

3. Ask the student to tell you his or her favorite food recipe. Then, after you have printed it, ask the student to read the words back to you.

4. Scavenger hunt: Ask the student to look in his or her lesson book to find examples of the words that begin with, end with, or contain a particular sound.

5. Make a sandbox using the top of a cardboard box filled with sand. Ask the student to draw particular letters or words in the sand and then sound them out.

6. Identify words that can morph into entirely new words when the initial sound is replaced with a different sound. Ask the student to list these new words (e.g., dog = bog, hog, log, etc.).

For older students:

1. Ask the student to read his or her favorite comic strip from the local newspaper, sounding out the words with a focus on consonants.

2. Ask the student to write a brief letter to a favorite sports or music star and then to sound out the words.

3. Ask the student to look at the front page of a newspaper and to circle as many double consonants (or other letter combinations) he or she can find.

4. Using newspaper headlines, ask the student to find 10 words that display a particular word part or letter combination.

5. Write five words taken from a brief reading passage. Ask the student to split the words into syllables and then to sound them out.

6. Ask the student look for words in his or her textbook displaying a particular word part or letter combination. Give the student a mark or chip for each one found. When the student finds 5, 10, 15, and 20, he or she is given a reward of some kind.
Error Analysis Word List
Grade Norms: Fall, Grade 8

Single/Double Consonant

LEVEL 1
bet  bed  cup  dive  den  feet
face got  gem  hen  had  jet
keep kite  lane  leg  mat  need
pot pine  quit  rain  rot  save
seat take  top  vine  wait  win
yes  zoo  tell  grill  pill  yell
dull cell  kiss  mess  toss  less
dress pass  stuff  stiff  buzz

LEVEL 2
begun wagon  turning  reformation  investigate  decorate
number verbal  conversation  quantity  decimate  obtain
television solitude  handsome  movement  wisdom  loneliness
never  pencil  rabbit  mitten  happen  stuffy
bottom lesson  sudden  merry  hurry  jogging
batter begged  hitting  telling  running  suffering
splatter carried  happiness  submitting

Consonant Digraph

thus  them  than  those  rather  mother
thirty thick  bath  sixth  math  cloth
teeth  pathway  white  whale  when  whether
whip  whisper  shop  shin  shut  shot
shelf shell  ship  shirt  sheet  sharp
shovel dash  wish  rush  cash  fish
hush  dolphin  phonics  nephew  orphan  alphabet
triumph  pharmacy  photograph  symphony  paragraph  physical
atmosphere chin  cheek  chain  children  chicken
chair chill  chess  check  challenge  peach
branch beach  coach  such  rich  inch
teach lunch  chemist  echo  chorus  architect
<table>
<thead>
<tr>
<th>Chronic</th>
<th>Cholesterol</th>
<th>Character</th>
<th>Orchid</th>
<th>Mechanic</th>
<th>Aching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orchestra</td>
<td>Monarch</td>
<td>Stomach</td>
<td>Machine</td>
<td>Brochure</td>
<td>Charade</td>
</tr>
<tr>
<td>Chateau</td>
<td>Chicago</td>
<td>Chivalry</td>
<td>Mustache</td>
<td>Chauffeur</td>
<td>Chandelier</td>
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</table>

**Short Vowel**

**LEVEL 1**

<table>
<thead>
<tr>
<th>past</th>
<th>sat</th>
<th>act</th>
<th>mass</th>
<th>cash</th>
<th>back</th>
</tr>
</thead>
<tbody>
<tr>
<td>strap</td>
<td>fast</td>
<td>map</td>
<td>fat</td>
<td>snap</td>
<td>fed</td>
</tr>
<tr>
<td>ten</td>
<td>spent</td>
<td>cell</td>
<td>met</td>
<td>egg</td>
<td>melt</td>
</tr>
<tr>
<td>test</td>
<td>bed</td>
<td>step</td>
<td>spin</td>
<td>hid</td>
<td>miss</td>
</tr>
<tr>
<td>it</td>
<td>fin</td>
<td>stiff</td>
<td>sit</td>
<td>cliff</td>
<td>clip</td>
</tr>
<tr>
<td>dish</td>
<td>log</td>
<td>block</td>
<td>toss</td>
<td>cot</td>
<td>spot</td>
</tr>
<tr>
<td>rod</td>
<td>plot</td>
<td>not</td>
<td>doll</td>
<td>rock</td>
<td>tub</td>
</tr>
<tr>
<td>lump</td>
<td>bug</td>
<td>just</td>
<td>fun</td>
<td>up</td>
<td>hut</td>
</tr>
<tr>
<td>rub</td>
<td>bus</td>
<td>drum</td>
<td></td>
<td></td>
<td></td>
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</table>

**LEVEL 2**

<table>
<thead>
<tr>
<th>apple</th>
<th>plastic</th>
<th>fragment</th>
<th>atom</th>
<th>rapid</th>
<th>static</th>
</tr>
</thead>
<tbody>
<tr>
<td>rational</td>
<td>representative</td>
<td>automatic</td>
<td>problem</td>
<td>puppet</td>
<td>splendid</td>
</tr>
<tr>
<td>telling</td>
<td>better</td>
<td>center</td>
<td>defense</td>
<td>melody</td>
<td>pencil</td>
</tr>
<tr>
<td>receptive</td>
<td>reverence</td>
<td>visit</td>
<td>solid</td>
<td>linen</td>
<td>rapid</td>
</tr>
<tr>
<td>missile</td>
<td>tennis</td>
<td>permit</td>
<td>transmitted</td>
<td>bristle</td>
<td>sixteen</td>
</tr>
<tr>
<td>tropic</td>
<td>seldom</td>
<td>closet</td>
<td>random</td>
<td>problems</td>
<td>comet</td>
</tr>
<tr>
<td>gossip</td>
<td>cotton</td>
<td>office</td>
<td>illogical</td>
<td>button</td>
<td>public</td>
</tr>
<tr>
<td>trumpet</td>
<td>fumble</td>
<td>bubble</td>
<td>thunder</td>
<td>mustard</td>
<td>glutton</td>
</tr>
<tr>
<td>punishment</td>
<td>customer</td>
<td>synonym</td>
<td>syllable</td>
<td>antonym</td>
<td>gypsy</td>
</tr>
<tr>
<td>gypsum</td>
<td>gym</td>
<td>hypnosis</td>
<td>physical</td>
<td>cylinder</td>
<td>bicycle</td>
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</table>

**Long Vowel**

**LEVEL 1**

<table>
<thead>
<tr>
<th>date</th>
<th>same</th>
<th>made</th>
<th>cape</th>
<th>race</th>
<th>lane</th>
</tr>
</thead>
<tbody>
<tr>
<td>maze</td>
<td>space</td>
<td>flame</td>
<td>me</td>
<td>we</td>
<td>eve</td>
</tr>
<tr>
<td>these</td>
<td>gene</td>
<td>be</td>
<td>scene</td>
<td>bike</td>
<td>fine</td>
</tr>
<tr>
<td>crime</td>
<td>pile</td>
<td>pipe</td>
<td>find</td>
<td>fright</td>
<td>light</td>
</tr>
<tr>
<td>sigh</td>
<td>quite</td>
<td>kind</td>
<td>bone</td>
<td>tone</td>
<td>smoke</td>
</tr>
<tr>
<td>so</td>
<td>cove</td>
<td>hope</td>
<td>globe</td>
<td>joke</td>
<td>groove</td>
</tr>
<tr>
<td>tune</td>
<td>cute</td>
<td>flute</td>
<td>rude</td>
<td>spruce</td>
<td>tube</td>
</tr>
<tr>
<td>June</td>
<td>prune</td>
<td>fry</td>
<td>cry</td>
<td>fly</td>
<td>shy</td>
</tr>
<tr>
<td>spy</td>
<td>type</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**LEVEL 2**

<table>
<thead>
<tr>
<th>apron</th>
<th>membrane</th>
<th>estate</th>
<th>oasis</th>
<th>agent</th>
<th>baby</th>
</tr>
</thead>
<tbody>
<tr>
<td>nasal</td>
<td>faded</td>
<td>cables</td>
<td>nation</td>
<td>maple</td>
<td>refrigerated</td>
</tr>
<tr>
<td>event</td>
<td>fever</td>
<td>recede</td>
<td>video</td>
<td>elope</td>
<td>meter</td>
</tr>
</tbody>
</table>
stampede  nucleus  benzene  evaporate  realized  silent
vital     incline  fiber    item     lion      item
textile  obey    omit   broken  nomads   won't
radio    cargo    devotion     locate   also    sloping
moment  humid   unit  super    student  pupil
bugle    singular  evolution  insinuate regulations funny
many     pretty  city  easy      story    baby
lady     hydrant

Vowel Team/Diphthong

season  dream  beach  clean  east  each
leaf     reach  bread  meant  instead  spread
feather  ready  leather  meadow  heavy  flee
deep    beef    seem  speed  sleep  agree
sixteen  valley  key    turkey  chimney  obey
convey  prey  survey  kidney  hockey  veins
reindeer  ceiling  deceit  either  neither  receive
protein  drew  threw  flew  curfew  mildew
soak     goal    roam  float  foam  coach
cloth    throat  toasted  shampoo  cartoon  platoon
cocoon  foolish  hood  mistook  crook  look
loud    found  count  sprout  group  youth
route    touch  double  couple  trouble  fabulous
famous  nervous  crown  flower  powerful  now
cow     plow    pillow  shadow  hollow  bowl
borrow  tomorrow  true  glue  avenue  tissue
continue  value  tie    lie     pie     brief
shield  field  relief  pierce  believe  haul
fault    audition  author  vault   awful  draw
straw    unlawful  sawdust  lawn  fail   pain
chain    wait    paid  waist  gain   mail
raised  detail  complaint  proclaim  entertain  relay
delay    essay  display  crayon  stalk  talk
walnut  already  smaller  altitude  alphabet  join
soil     boil    moist  noise  coin   voice
exploit  moisture  avoid  boy    toy    joy
annoy    loyal  destroy  employment  neutral  feudal
therapeutic  euphoria

R-controlled Vowel

LEVEL 1
term     verb  perch  herd  fern    stern
perk     perm  harm  sharp  yard  march
dark     starch  hard  start  corn   pork
<table>
<thead>
<tr>
<th>Storm</th>
<th>Short</th>
<th>Form</th>
<th>Porch</th>
<th>Fort</th>
<th>Third</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>Firm</td>
<td>Birth</td>
<td>Skirt</td>
<td>Stir</td>
<td>Thirst</td>
</tr>
<tr>
<td>Bird</td>
<td>Flirt</td>
<td>Turn</td>
<td>Burn</td>
<td>Hurt</td>
<td>Church</td>
</tr>
<tr>
<td>Curb</td>
<td>Burst</td>
<td>Nurse</td>
<td>Curse</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**LEVEL 2**

<table>
<thead>
<tr>
<th>Sister</th>
<th>Banker</th>
<th>Personal</th>
<th>Remember</th>
<th>Destroyer</th>
<th>Deserved</th>
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</thead>
<tbody>
<tr>
<td>Character</td>
<td>Inherit</td>
<td>Prosperity</td>
<td>Territory</td>
<td>Experiment</td>
<td>Merry</td>
</tr>
<tr>
<td>Terrible</td>
<td>Terror</td>
<td>Clerical</td>
<td>Verify</td>
<td>Error</td>
<td>Arbitrary</td>
</tr>
<tr>
<td>Partners</td>
<td>Departing</td>
<td>Darkness</td>
<td>Garden</td>
<td>Harvest</td>
<td>Dollar</td>
</tr>
<tr>
<td>Particular</td>
<td>Popular</td>
<td>Regular</td>
<td>Similar</td>
<td>Scare</td>
<td>Charity</td>
</tr>
<tr>
<td>Parent</td>
<td>Arrow</td>
<td>Harassment</td>
<td>Important</td>
<td>Forget</td>
<td>Orbit</td>
</tr>
<tr>
<td>Torment</td>
<td>Corner</td>
<td>Instructor</td>
<td>Visitor</td>
<td>Inventor</td>
<td>Favor</td>
</tr>
<tr>
<td>Accordion</td>
<td>Unfortunate</td>
<td>Worker</td>
<td>Worthless</td>
<td>Worship</td>
<td>Thirsty</td>
</tr>
<tr>
<td>Circus</td>
<td>Irritate</td>
<td>Miracle</td>
<td>Irrational</td>
<td>Miraculous</td>
<td>Furnish</td>
</tr>
<tr>
<td>Further</td>
<td>Disturb</td>
<td>Murmur</td>
<td>Figure</td>
<td>Fury</td>
<td>Accurate</td>
</tr>
<tr>
<td>Mercury</td>
<td>Secure</td>
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**Silent Letter**

<table>
<thead>
<tr>
<th>Home</th>
<th>Cave</th>
<th>Late</th>
<th>Taste</th>
<th>Smile</th>
<th>Blame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prescribe</td>
<td>Explode</td>
<td>Profile</td>
<td>Extreme</td>
<td>Love</td>
<td>Give</td>
</tr>
<tr>
<td>Have</td>
<td>Move</td>
<td>Exchange</td>
<td>Range</td>
<td>Large</td>
<td>Strange</td>
</tr>
<tr>
<td>Force</td>
<td>Disgrace</td>
<td>Pierce</td>
<td>Surface</td>
<td>Sigh</td>
<td>High</td>
</tr>
<tr>
<td>Bright</td>
<td>Tight</td>
<td>Weigh</td>
<td>Slight</td>
<td>Might</td>
<td>Fight</td>
</tr>
<tr>
<td>Light</td>
<td>Right</td>
<td>Flight</td>
<td>Should</td>
<td>Would</td>
<td>Could</td>
</tr>
<tr>
<td>Honest</td>
<td>Honor</td>
<td>Herbs</td>
<td>Dialogue</td>
<td>Wrestler</td>
<td>Rogue</td>
</tr>
<tr>
<td>Thistle</td>
<td>Bristle</td>
<td>Nestle</td>
<td>Wrestler</td>
<td>Caught</td>
<td>Daughter</td>
</tr>
<tr>
<td>Taught</td>
<td>Thought</td>
<td>Brought</td>
<td>Knew</td>
<td>Caught</td>
<td>Daughter</td>
</tr>
<tr>
<td>Knit</td>
<td>Knob</td>
<td>Knee</td>
<td>Knapsack</td>
<td>Bridge</td>
<td>Pitch</td>
</tr>
<tr>
<td>Knight</td>
<td>Edge</td>
<td>Lodge</td>
<td>Patch</td>
<td>Rhyme</td>
<td>Rhythm</td>
</tr>
<tr>
<td>Badge</td>
<td>Match</td>
<td>Crutch</td>
<td>Scissors</td>
<td>Gnat</td>
<td>Gnat</td>
</tr>
<tr>
<td>Bouquet</td>
<td>Scent</td>
<td>Science</td>
<td>Rhapsody</td>
<td>Reign</td>
<td>Reign</td>
</tr>
<tr>
<td>Rheumatic</td>
<td>Rhubarb</td>
<td>Rhinoceros</td>
<td>Rhapsody</td>
<td>Gnat</td>
<td>Gnat</td>
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<td>Design</td>
<td>Gnarled</td>
<td>Gnome</td>
<td>Gnat</td>
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<td>Wrap</td>
<td>Wrist</td>
<td>Wrong</td>
<td>Wreck</td>
<td>Write</td>
<td>Wrinkle</td>
</tr>
<tr>
<td>Wrench</td>
<td>Wreath</td>
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</tr>
</tbody>
</table>

**Prefix/Word Beginning**

<table>
<thead>
<tr>
<th>Accent</th>
<th>Accompany</th>
<th>Accomplish</th>
<th>Accuse</th>
<th>Approve</th>
<th>Appeal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approach</td>
<td>Absent</td>
<td>Absorb</td>
<td>Abstain</td>
<td>Abduct</td>
<td>Absurd</td>
</tr>
<tr>
<td>Announce</td>
<td>Anoint</td>
<td>Annoyance</td>
<td>Allow</td>
<td>Allocate</td>
<td>Alleviate</td>
</tr>
<tr>
<td>Antidepressant</td>
<td>Antibacterial</td>
<td>Antibiotic</td>
<td>Archeology</td>
<td>Architecture</td>
<td>Become</td>
</tr>
<tr>
<td>Belittle</td>
<td>Beside</td>
<td>Between</td>
<td>Comment</td>
<td>Commute</td>
<td>Commercial</td>
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<tr>
<td>Complain</td>
<td>Compare</td>
<td>Compile</td>
<td>Compose</td>
<td>Complex</td>
<td>Connect</td>
</tr>
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</table>
## Unpredictable Pattern

<table>
<thead>
<tr>
<th>Unpredictable Pattern</th>
<th>Unpredictable Pattern</th>
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<th>Unpredictable Pattern</th>
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<tbody>
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<td>chorus</td>
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<td>character</td>
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<td>anchor</td>
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<td>chandelier</td>
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<td>accomplice</td>
<td>practice</td>
<td>heaven</td>
<td>breathless</td>
<td>feather</td>
<td></td>
</tr>
<tr>
<td>instead</td>
<td>pleasant</td>
<td>heavy</td>
<td>steady</td>
<td>hypocrite</td>
<td>mystery</td>
<td></td>
</tr>
<tr>
<td>system</td>
<td>sympathy</td>
<td>crystal</td>
<td>synonym</td>
<td>antonym</td>
<td>symbol</td>
<td></td>
</tr>
<tr>
<td>flown</td>
<td>grown</td>
<td>blown</td>
<td>yellow</td>
<td>follow</td>
<td>borrow</td>
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</tr>
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<td>shadow</td>
<td>window</td>
<td>engine</td>
<td>imagine</td>
<td>destined</td>
<td>determine</td>
<td></td>
</tr>
<tr>
<td>marine</td>
<td>gasoline</td>
<td>chlorine</td>
<td>vaccine</td>
<td>conquer</td>
<td>antique</td>
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<tr>
<td>opaque</td>
<td>critique</td>
<td>unique</td>
<td>grotesque</td>
<td>technique</td>
<td>revere</td>
<td></td>
</tr>
<tr>
<td>hero</td>
<td>series</td>
<td>period</td>
<td>cereal</td>
<td>interfere</td>
<td>cafeteria</td>
<td></td>
</tr>
<tr>
<td>carried</td>
<td>happier</td>
<td>funniest</td>
<td>lonelier</td>
<td>chocolate</td>
<td>climate</td>
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<tr>
<td>delicate</td>
<td>private</td>
<td>pirate</td>
<td>senate</td>
<td>favorite</td>
<td>opposite</td>
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<td>composite</td>
<td>prerequisite</td>
<td>mountain</td>
<td>fountain</td>
<td>bargain</td>
<td>villain</td>
<td></td>
</tr>
</tbody>
</table>
Addition Objective 1

\[
\begin{align*}
5 & + 3 & + 2 & + 3 \\
2 & + 2 & + 2 & + 4
\end{align*}
\]

\[
\begin{align*}
8 & + 4 & + 5 & + 6 \\
9 & + 5 & + 5 & + 8
\end{align*}
\]

\[
\begin{align*}
4 & + 7 & + 5 & + 3 \\
7 & + 5 & + 5 & + 8
\end{align*}
\]

3 + 3 = 
5 + 1 =
Addition Objective 2

36 + 3 = 39
52 + 7 = 59
45 + 2 = 47
42 + 26 = 68

327 + 32 = 359
742 + 46 = 788
564 + 34 = 598
35 + 53 = 88

57 + 41 = 98
21 + 36 = 57
97 + 68 = 165
Regrouping: Addition Objective 1

\[
\begin{array}{ccc}
49 & 54 & 39 \\
+ 38 & + 27 & + 43 \\
\hline
677 & 784 & 448 \\
+ 54 & + 48 & + 75 \\
\hline
273 & 375 & 539 \\
+ 439 & + 757 & + 983 \\
\end{array}
\]
Subtraction Objective 1

\[
\begin{array}{ccc}
8 & 7 & 9 \\
-2 & -3 & -5 \\
6 & 18 & 13 \\
-5 & -9 & -4 \\
10 & 15 & 11 \\
-3 & -6 & -5 \\
\end{array}
\]

\[
2 - 1 = \\
7 - 2 = 
\]
Subtraction Objective 2

\[
\begin{array}{ccc}
67 & 53 & 49 \\
-23 & -32 & -27
\end{array}
\]

\[
\begin{array}{ccc}
47 & 26 & 57 \\
-33 & -14 & -25
\end{array}
\]

\[
\begin{array}{ccc}
755 & 864 & 476 \\
-23 & -13 & -32
\end{array}
\]

75 \ -\ 24 = \\
83 \ -\ 21 =
## Regrouping: Subtraction Objective 1

<p>| | | |</p>
<table>
<thead>
<tr>
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<tr>
<td>92</td>
<td>35</td>
<td>64</td>
</tr>
<tr>
<td>−7</td>
<td>−6</td>
<td>−8</td>
</tr>
</tbody>
</table>

<p>| | | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>56</td>
<td>76</td>
<td>64</td>
</tr>
<tr>
<td>−37</td>
<td>−28</td>
<td>−49</td>
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</table>

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>523</td>
<td>734</td>
<td>695</td>
</tr>
<tr>
<td>−74</td>
<td>−45</td>
<td>−78</td>
</tr>
</tbody>
</table>

67 − 9 =

46 − 8 =
**Multiplication Objective 1**

\[
\begin{array}{ccc}
6 & 3 & 8 \\
\times 3 & \times 5 & \times 7
\end{array}
\]

\[
\begin{array}{ccc}
7 & 3 & 5 \\
\times 6 & \times 4 & \times 5
\end{array}
\]

\[
\begin{align*}
4 \times 2 &= \\
3 \times 3 &= \\
5 \times 4 &= \\
2 \times 6 &= \\
7 \times 8 &= \\
6 \times 9 &=
\end{align*}
\]
**Multiplication Objective 2**

\[
\begin{array}{cccc}
42 & 23 & 31 & 213 \\
\times 3 & \times 2 & \times 3 & \times 3 \\
\end{array}
\]

\[
\begin{array}{cccc}
423 & 314 & 22 & 21 \\
\times 2 & \times 2 & \times 4 & \times 9 \\
\end{array}
\]

\[
516 \times 1 = \\
1,222 \times 5 =
\]
Multiplication Objective 3

2 \times 10 =
45 \times 10 =
34 \times 100 =
170 \times 100 =
58 \times 1,000 =
620 \times 1,000 =
Multiplication Objective 4

27 \times 9 =
34 \times 5 =
56 \times 6 =

43 \times 8 =
325 \times 7 =
747 \times 5 =

119 \times 3 =
581 \times 2 =
152 \times 4 =

38 \times 7 =
65 \times 3 =
Multiplication Objective 5

32 \times 42 \quad 21 \times 53 \quad 43 \times 32

25 \times 17 \quad 27 \times 34 \quad 15 \times 24

364 \times 24 \quad 723 \times 56 \quad 358 \times 243

52 \times 31 =
73 \times 21 =
### Multiplication Objective 6

<table>
<thead>
<tr>
<th>304</th>
<th>2,050</th>
<th>408</th>
</tr>
</thead>
<tbody>
<tr>
<td>× 3</td>
<td>× 3</td>
<td>× 20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>704</th>
<th>8,080</th>
<th>3,009</th>
</tr>
</thead>
<tbody>
<tr>
<td>× 40</td>
<td>× 15</td>
<td>× 27</td>
</tr>
</tbody>
</table>
**Multiplication Objective 7**

3! = 

2! = 

6! = 

8! =
Division Objective 1

\[ \frac{3}{6} \quad \frac{5}{10} \quad \frac{2}{8} \]

\[ \frac{6}{18} \quad \frac{4}{12} \quad \frac{3}{15} \]

\[ 25 \div 5 = \]
\[ 11 \div 1 = \]
\[ 49 \div 7 = \]
**Division Objective 2**

3)69  
2)84  
5)105  

3)693  
3)156  
4)128  

6)246  
8)568  
7)217  

88 ÷ 4 =  
482 ÷ 2 =
Division Objective 3

\[
\begin{array}{ccc}
4) & 165 & 3) & 54 & 4) & 92 \\
6) & 85 & 2) & 79 & 5) & 76 \\
\end{array}
\]

\[
\begin{align*}
158 \div 5 &= \\
65 \div 5 &= 
\end{align*}
\]
Division Objective 4

\[
\begin{align*}
22 & \overline{352} \\
11 & \overline{363} \\
22 & \overline{572} \\
18 & \overline{144} \\
15 & \overline{317} \\
12 & \overline{265}
\end{align*}
\]

\[
\begin{align*}
252 \div 12 &= \\
449 \div 14 &=
\end{align*}
\]
Division Objective 5

6)270
4)104
5)470

12)408
11)209
10)350

6)3,081
7)240
20)906
Fractions Objective 1

\[
\frac{5}{8} + \frac{2}{8} = \quad \frac{1}{9} + \frac{2}{9} =
\]

\[
\frac{5}{12} + \frac{1}{12} = \quad \frac{5}{6} + \frac{5}{6} =
\]

\[
\frac{7}{25} \quad \frac{7}{19} \quad \frac{4}{15}
\]

\[
+ \frac{16}{25} \quad + \frac{14}{19} \quad + \frac{11}{15}
\]
Fractions Objective 2

\[
\frac{4}{5} - \frac{2}{5} = \quad \frac{5}{6} - \frac{4}{6} = \\
\frac{5}{8} - \frac{3}{8} = \quad \frac{3}{4} - \frac{1}{4} = \\
\frac{5}{9} \quad \frac{6}{7} \quad \frac{3}{9} \quad \frac{3}{7} \\
- \frac{12}{17} \quad - \frac{8}{17}
Equivalent Fraction/Common Denominator Objective 1

\[
\frac{8}{12} = \frac{5}{20} = \frac{12}{28} =
\]

\[
\frac{14}{21} = \frac{10}{18} = \frac{4}{16} =
\]
Equivalent Fraction/Common Denominator Objective 2

\[ \frac{4}{7} = \_\_\_ \quad \frac{3}{5} = \_\_\_ \quad \frac{5}{12} = \_\_\_ \]

\[ \frac{2}{9} = \_\_\_ \quad \frac{12}{14} = \_\_\_ \quad \frac{11}{12} = \_\_\_ \]
Equivalent Fraction/Common Denominator Objective 3

\[
\frac{1}{4} + \frac{3}{8} = \quad \frac{2}{3} + \frac{3}{12} = \quad \frac{1}{5} + \frac{1}{15} = \\
\frac{1}{2} + \frac{3}{8} = \quad \frac{2}{3} + \frac{3}{5} = \quad \frac{1}{4} + \frac{1}{3} =
\]
Equivalent Fraction/Common Denominator Objective 4

\[
\frac{2}{3} - \frac{1}{2} = \quad \frac{5}{7} - \frac{1}{3} =
\]

\[
\frac{3}{5} - \frac{1}{4} = \quad \frac{7}{16} - \frac{3}{8} =
\]

\[
\frac{3}{4} - \frac{2}{3} = \quad \frac{2}{3} - \frac{2}{7} = \quad \frac{2}{5}
\]
Multiply/Divide Fractions Objective 1

\[
\frac{1}{3} \times \frac{4}{5} = \quad \frac{2}{5} \times \frac{1}{7} = \quad \frac{3}{7} \times \frac{1}{2} = \\
\frac{3}{4} \times \frac{5}{7} = \quad \frac{3}{4} \times \frac{2}{3} = \quad \frac{4}{8} \times \frac{1}{2} =
\]
Multiply/Divide Fractions Objective 2

\[
\frac{1}{4} \times 5 = \quad \frac{1}{8} \times 9 = \quad \frac{2}{5} \times 7 =
\]

\[
2 \times \frac{2}{3} = \quad 3 \times \frac{3}{5} = \quad 4 \times \frac{3}{7} =
\]
Multiply/Divide Fractions Objective 3

\[
\frac{2}{4} \div \frac{3}{5} = \quad \frac{3}{8} \div \frac{4}{7} = \quad \frac{2}{3} \div \frac{5}{6} = \\
\frac{4}{5} \div \frac{5}{6} = \quad \frac{2}{9} \div \frac{2}{5} = \quad \frac{3}{7} \div \frac{4}{5} = 
\]
Multiply/Divide Fractions Objective 4

\[
\frac{3}{4} \div 6 = \\
\frac{5}{9} \div 2 = \\
\frac{1}{2} \div 12 = \\
4 \div \frac{7}{13} = \\
10 \div \frac{1}{4} = \\
1 \div \frac{1}{8} = 
\]
Mixed Numbers Objective 1

\[
\begin{align*}
5 \frac{3}{8} + 2 \frac{1}{6} &= & 5 \frac{1}{3} + 4 \frac{1}{6} &= \\
7 \frac{1}{11} + 2 \frac{2}{33} &= & 6 \frac{3}{7} + 3 \frac{1}{3} &= \\
4 \frac{11}{15} + 7 \frac{3}{5} &= & 10 \frac{2}{3} + 4 \frac{12}{15} &= 
\end{align*}
\]
Mixed Numbers Objective 2

\[
\begin{align*}
8 \ 7/10 & \quad 4 \ 11/12 \\
-3 \ 1/5 & \quad -1 \ 3/4 \\
15 \ 1/2 & \quad 19 \ 13/14 \\
-2 \ 3/8 & \quad -5 \ 2/7 \\
3 \ 5/6 - 2 \ 2/3 & = \\
7 \ 2/3 - 2 \ 1/6 & =
\end{align*}
\]
Mixed Numbers Objective 3

\[ 1 \frac{1}{2} \times 1 \frac{1}{3} = \]

\[ 6 \frac{3}{5} \times 2 \frac{2}{9} = \]

\[ 3 \frac{2}{3} \times 1 \frac{1}{2} = \]

\[ 5 \frac{4}{5} \times 2 \frac{1}{3} = \]

\[ 7 \frac{1}{8} \times 4 \frac{4}{13} = \]

\[ 10 \frac{1}{2} \times 3 \frac{1}{4} = \]
Mixed Numbers Objective 4

\[ \frac{1}{2} + 2 \frac{1}{3} = \]

\[ \frac{4}{6} \div 3 \frac{3}{8} = \]

\[ 2 \frac{7}{16} \div 1 \frac{1}{4} = \]

\[ 8 \frac{1}{3} \div 5 \frac{1}{9} = \]

\[ 6 \frac{1}{5} \div 2 \frac{1}{4} = \]

\[ 5 \frac{1}{8} \div 5 \frac{1}{6} = \]
### Decimals Objective 1

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
</tr>
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<tbody>
<tr>
<td>7.5</td>
<td>4.3</td>
<td>8.7</td>
<td>9.8</td>
</tr>
<tr>
<td>+ 2.4</td>
<td>+ 4.5</td>
<td>+ 8.2</td>
<td>+ 7.6</td>
</tr>
</tbody>
</table>

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>24.051</td>
<td>36.458</td>
<td>124.63</td>
<td>974.99</td>
</tr>
<tr>
<td>+ 3.99</td>
<td>+ 4.7</td>
<td>+ 8.2</td>
<td>+ 43.7</td>
</tr>
</tbody>
</table>

2.64 + 3.2 =
5.26 + 2.5 =
8.35 + 8.89 =
Decimals Objective 2

\[
\begin{array}{cccc}
7.9 & 8.4 & 6.3 & 5.7 \\
-6.4 & -2.3 & -2.8 & -1.9 \\
7.5 & 8.9 & 9.7 & 7.37 \\
-3.25 & -4.73 & -5.36 & -4.66 \\
9.45 - 7.68 = & & & \\
39.7 - 6.4 = & & & \\
58.3 - 5.2 = & & & \\
\end{array}
\]
Decimals Objective 3

<table>
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<tr>
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<th>Multiplier</th>
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<tbody>
<tr>
<td>1.3</td>
<td>2</td>
</tr>
<tr>
<td>2.4</td>
<td>0.2</td>
</tr>
<tr>
<td>2.3</td>
<td>0.3</td>
</tr>
<tr>
<td>3.4</td>
<td>3.4</td>
</tr>
<tr>
<td>2.3</td>
<td>2.8</td>
</tr>
<tr>
<td>5.2</td>
<td>0.25</td>
</tr>
<tr>
<td>1.5</td>
<td>3.7</td>
</tr>
<tr>
<td>0.27</td>
<td>0.82</td>
</tr>
<tr>
<td>0.003</td>
<td>0.03</td>
</tr>
<tr>
<td>0.004</td>
<td>0.06</td>
</tr>
<tr>
<td>4.102</td>
<td>0.02</td>
</tr>
<tr>
<td>0.042</td>
<td>0.231</td>
</tr>
</tbody>
</table>
Decimals Objective 4

\[ 7.82 \times 10 = \]
\[ 3.45 \times 10 = \]
\[ 2.98 \times 100 = \]
\[ 32.05 \times 10 = \]
\[ 17.24 \times 100 = \]
\[ 2.844 \times 1,000 = \]
Decimals Objective 5

\[
\begin{array}{ccc}
0.3 \div 0.24 & 0.5 \div 0.025 & 0.04 \div 0.0024 \\
0.04 \div 0.88 & 1.2 \div 240.12 & 0.03 \div 0.0012 \\
\end{array}
\]

\[
0.14 \div 0.2 =
\]

\[
0.36 \div 0.06 =
\]
Decimals Objective 6

3.6 ÷ 10 = 
32.98 ÷ 100 = 
7.34 ÷ 100 = 
925.6 ÷ 100 = 
277.4 ÷ 1,000 = 
468.72 ÷ 1,000 =
Exponents or Roots Objective 1

\[ 3^3 = \]
\[ 4^2 = \]
\[ 5^3 = \]
\[ 2^4 = \]
\[ 5^2 = \]
Exponents or Roots Objective 2

\[ \sqrt{16} = \]
\[ \sqrt{25} = \]
\[ \sqrt{64} = \]
\[ \sqrt{81} = \]
Exponents or Roots Objective 3

\[ \sqrt{\frac{16}{36}} = \]

\[ \sqrt{\frac{25}{81}} = \]

\[ \sqrt{\frac{4}{64}} = \]

\[ \sqrt{\frac{1}{49}} = \]
Exponents or Roots Objective 4

\[ \sqrt[3]{8} = \]

\[ \sqrt[3]{1,000} = \]

\[ \sqrt[3]{216} = \]

\[ \sqrt[3]{125} = \]
Exponents or Roots Objective 5

\[(b^4)(ab^5) = \]  
\[(c^6d^2)(c^3d^5) = \]

\[(qrs^2)(qr^5s^4) = \]  
\[(x^3y^2z)(x^5y^2z^2) = \]

\[\frac{x^5y^7}{x^5y^3} = \]  
\[\frac{a^9b^4}{a^3bc} = \]

\[\frac{x^4y^2z^2}{x^3y^6} = \]  
\[\frac{a^5b^3}{a^8b^2c^2} = \]
Exponents or Roots Objective 6

\[ \sqrt{0.0016} = \]

\[ \sqrt{0.0064} = \]

\[ \sqrt{0.09} = \]

\[ \sqrt{0.000081} = \]
Exponents or Roots Objective 7

\[ 4^{-2} = \]
\[ 3^{-3} = \]
\[ 3^{-4} = \]
\[ 2^{-2} = \]
\[ 2^{-3} = \]
Algebra Objective 1

\[ x + 16 = 32 \quad x + 16 = 36 \quad x - 14 = 7 \]
\[ x = \quad x = \quad x = \]

\[ 3x + 3 = 30 \quad 7x + 11 = 81 \quad 6x - 5 = 31 \]
\[ x = \quad x = \quad x = \]

\[ \frac{x}{12} = 4 \quad \frac{x}{9} = 8 \quad \frac{8}{x} = 2 \]
\[ x = \quad x = \quad x = \]
Algebra Objective 2

$$25 + x < -12x$$  $$8 - 12x < 92$$  $$16 - 3x < 43$$

$$x <$$  $$x <$$  $$x <$$

$$4x + 36 = -5x$$  $$3x - 13 = 4x$$

$$x =$$  $$x =$$
**Algebra Objective 3**

If \( x = 4 \) and \( y = 3 \),

\[
\frac{6x - 2y}{3xy} = \frac{6(4) - 2(3)}{3(4)(3)} = \frac{24 - 6}{36} = \frac{18}{36} = \frac{1}{2}
\]

If \( x = 2 \) and \( y = 4 \),

\[
\frac{4x - y}{2xy} = \frac{4(2) - 4}{2(2)(4)} = \frac{8 - 4}{16} = \frac{4}{16} = \frac{1}{4}
\]

If \( x = 3 \) and \( y = 2 \),

\[
\frac{3x - 3y}{xy} = \frac{3(3) - 3(2)}{3(2)} = \frac{9 - 6}{6} = \frac{3}{6} = \frac{1}{2}
\]

If \( x = 3 \) and \( y = 5 \),

\[
\frac{5x + 4y}{3xy} = \frac{5(3) + 4(5)}{3(3)(5)} = \frac{15 + 20}{45} = \frac{35}{45} = \frac{7}{9}
\]
Algebra Objective 4

\[(x + 2)(x + 5) = \]

Expand:
\[(a + b)^2 = \]

Expand:
\[(c + d)^3 = \]
Algebra Objective 5

\[(x - 7)(x - 6) = \]

\[(x + 5)(x - 8) = \]

\[(x - 3)^3 = \]
Incorrect Sign Objective 1

\[-4 + 1 = \quad -15 + 7 =\]

\[-2 + 6 = \quad -1 + 35 =\]

\[-6 + 3 = \quad -7 + 24 =\]
**Incorrect Sign Objective 2**

\[
\begin{align*}
(-4) - (-5) &=  \\
(-18) - (-6) &=  \\
(-9) - (-23) &=  \\
(-9) - 15 &=  \\
(-27) - 2 &=  \\
(-13) - 28 &= 
\end{align*}
\]
Incorrect Sign Objective 3

\((-2) \times (-3) = \) \hspace{2cm} \((-4) \times 5 = \)

\((-4) \times (-6) = \) \hspace{2cm} \(7 \times (-7) = \)

\((-15) \times (-7) = \) \hspace{2cm} \((-18) \times 12 = \)
Incorrect Sign Objective 4

\[ (-24) \div (-4) = \quad (-35) \div 5 = \]
\[ (-15) \div (-5) = \quad (-21) \div 7 = \]
\[ (-18) \div (-6) = \quad 12 \div (-3) = \]
KTEA-II Kaufman Test of Educational Achievement Second Edition

ANSWER KEY

Addition Objective 1

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Addition Objective 2

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### Regrouping: Addition Objective 1

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Subtraction Objective 1

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Subtraction Objective 2

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**Regrouping: Subtraction Objective 1**

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### Multiplication Objective 1

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|     | 8  | 9  | 20 | 12 | 56 | 54 |

### Multiplication Objective 2

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|     | 516| 6,110 |

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266
195

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1,533

### Multiplication Objective 6

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### Division Objective 1

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### Division Objective 2

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### Division Objective 3

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<td>14 R1</td>
<td>39 R1</td>
<td>15 R1</td>
</tr>
<tr>
<td>31 R3</td>
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<tr>
<td></td>
<td>13</td>
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</table>
Division Objective 4

16      33      26
8       21 R2   22 R1
21
32 R1

Division Objective 5

45      26      94
34      19      35
513 R3  34 R2   45 R6
Fractions Objective 1

\[
\frac{7}{8} \quad \frac{3}{9} = \frac{1}{3} \\
\frac{6}{12} = \frac{1}{2} \quad \frac{5}{3} = \frac{2}{3} \\
\frac{23}{25} \quad \frac{21}{19} = \frac{2}{19} \quad \frac{15}{15} = 1
\]

Fractions Objective 2

\[
\frac{2}{5} \quad \frac{1}{6} \\
\frac{2}{8} = \frac{1}{4} \quad \frac{2}{4} = \frac{1}{2} \\
\frac{2}{9} \quad \frac{3}{7} \\
\frac{4}{17}
\]
Equivalent Fraction/Common Denominator Objective 1

\[
\begin{array}{ccc}
\frac{2}{3} & \frac{1}{4} & \frac{3}{7} \\
\frac{2}{3} & \frac{5}{9} & \frac{1}{4}
\end{array}
\]

Equivalent Fraction/Common Denominator Objective 2

\[
\begin{array}{ccc}
14 & 15 & 24 \\
27 & 42 & 48
\end{array}
\]

Equivalent Fraction/Common Denominator Objective 3

\[
\begin{array}{ccc}
\frac{5}{8} & \frac{11}{12} & \frac{4}{15} \\
\frac{7}{8} & \frac{19}{15} = 1 \frac{4}{15} & \frac{7}{12}
\end{array}
\]

Equivalent Fraction/Common Denominator Objective 4

\[
\begin{array}{ccc}
\frac{1}{6} & \frac{8}{21} \\
\frac{7}{20} & \frac{1}{16}
\end{array}
\]

\[
\begin{array}{ccc}
\frac{14}{24} = \frac{7}{12} & \frac{8}{21} & \frac{4}{15}
\end{array}
\]
Multiply/Divide Fractions Objective 1

\[
\frac{4}{15} \quad \frac{2}{35} \quad \frac{3}{14}
\]

\[
\begin{array}{c}
\frac{15}{28} \quad \frac{6}{12} = \frac{1}{2} \quad \frac{4}{16} = \frac{1}{4}
\end{array}
\]

Multiply/Divide Fractions Objective 2

\[
\frac{5}{4} = 1 \frac{1}{4} \quad \frac{9}{8} = 1 \frac{1}{8} \quad \frac{14}{5} = 2 \frac{4}{5}
\]

\[
\begin{array}{c}
\frac{4}{3} = 1 \frac{1}{3} \quad \frac{9}{5} = 1 \frac{4}{5} \quad \frac{12}{7} = 1 \frac{5}{7}
\end{array}
\]

Multiply/Divide Fractions Objective 3

\[
\frac{10}{12} = \frac{5}{6} \quad \frac{21}{32} \quad \frac{12}{15} = \frac{4}{5}
\]

\[
\begin{array}{c}
\frac{24}{25} \quad \frac{10}{18} = \frac{5}{9} \quad \frac{15}{28}
\end{array}
\]

Multiply/Divide Fractions Objective 4

\[
\frac{3}{24} = \frac{1}{8} \quad \frac{5}{18}
\]

\[
\begin{array}{c}
\frac{1}{24} \quad \frac{52}{7} = 7 \frac{3}{7}
\end{array}
\]

40 8
Mixed Numbers Objective 1

\[ \frac{7}{24} + \frac{13}{24} = \frac{20}{24} = \frac{5}{6} = 5 \frac{1}{6} \]

\[ \frac{9}{6} = 9 \frac{1}{2} \]

\[ \frac{9}{33} = \frac{3}{11} \]

\[ \frac{9}{21} = 9 \frac{1}{7} \]

\[ \frac{11}{15} = 11 \frac{20}{15} = 12 \frac{1}{3} \]

\[ \frac{14}{15} = 14 \frac{22}{15} = 15 \frac{7}{15} \]

Mixed Numbers Objective 2

\[ \frac{5}{10} = 5 \frac{5}{10} = 5 \frac{1}{2} \]

\[ \frac{3}{12} = 3 \frac{2}{12} = 3 \frac{1}{6} \]

\[ \frac{13}{8} = 13 \frac{1}{8} \]

\[ \frac{14}{9} = 14 \frac{9}{14} \]

\[ \frac{1}{6} = 1 \frac{1}{6} \]

\[ \frac{5}{6} = 5 \frac{3}{6} = 5 \frac{1}{2} \]
Mixed Numbers Objective 3

\[ \frac{12}{6} = 2 \]

\[ \frac{44}{3} = 14 \frac{2}{3} \]

\[ \frac{11}{2} = 5 \frac{1}{2} \]

\[ \frac{203}{15} = 13 \frac{8}{15} \]

\[ \frac{399}{13} = 30 \frac{9}{13} \]

\[ \frac{273}{8} = 34 \frac{1}{8} \]

Mixed Numbers Objective 4

\[ \frac{9}{14} \]

\[ \frac{116}{81} = 1 \frac{35}{81} \]

\[ \frac{39}{20} = 1 \frac{19}{20} \]

\[ \frac{75}{46} = 1 \frac{29}{46} \]

\[ \frac{124}{45} = 2 \frac{34}{45} \]

\[ \frac{123}{124} \]
### Decimals Objective 1

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### Decimals Objective 2

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### Decimals Objective 3

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Decimals Objective 4

78.2
34.5
298
320.5
1,724
2,844

Decimals Objective 5

0.8  0.05  0.06
22  200.1  0.04
0.7
6

Decimals Objective 6

0.36
0.3298
0.0734
9.256
0.2774
0.46872
ANSWER KEY

**Exponents or Roots Objective 1**

27  16  125  16  25

**Exponents or Roots Objective 2**

4  5  8  9

**Exponents or Roots Objective 3**

\[
\frac{4}{6} = \frac{2}{3} \quad \frac{5}{9} \quad \frac{2}{8} = \frac{1}{4} \quad \frac{1}{7}
\]

**Exponents or Roots Objective 4**

2  10  6  5
Exponents or Roots Objective 5

\[ ab^9 \quad c^{11}d^7 \]
\[ q^2r^6s^6 \quad x^8y^4z^3 \]
\[ y^4 \quad \frac{a^6b^3}{c} \]
\[ \frac{xz^2}{y^4} \quad \frac{b}{a^3c^2} \]

Exponents or Roots Objective 6

.04 \quad .08 \quad .3 \quad .009

Exponents or Roots Objective 7

\[ \frac{1}{16} \quad \frac{1}{27} \quad \frac{1}{81} \quad \frac{1}{4} \quad \frac{1}{8} \]
## Algebra Objective 1

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## Algebra Objective 2

\[
\frac{-25}{13} = -1\frac{12}{13} \quad -7 \quad -9
\]

-4 \quad -13

## Algebra Objective 3

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<td>\frac{1}{2}</td>
<td>\frac{7}{9}</td>
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</table>
Algebra Objective 4

\( (x^2 + 7x + 10) \quad (a^2 + 2ab + b^2) \quad (c^3 + 3c^2d + 3cd^2 + d^3) \)

Algebra Objective 5

\( (x^2 - 13x + 42) \quad (x^2 - 3x - 40) \quad (x^3 - 9x^2 + 27x - 27) \)
**Incorrect Sign Objective 1**

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**Incorrect Sign Objective 2**

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**Incorrect Sign Objective 3**

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**Incorrect Sign Objective 4**

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