

acadience™ math

Computation

Grade 5 | Benchmark Assessment

Teacher Key

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These are photocopy masters for teacher keys. Make one copy for each person scoring the assessment.

Acadience™ Math / Computation Grade 5

Benchmark 1 / Form A / Teacher Key

of digits correct in the final answer | score

Scoring Direction

 Right to Left
 or

 Left to Right

1. $\begin{array}{r} 6787 \\ +1218 \\ \hline 8005 \end{array}$  <div>1 1</div> <div>2 2</div> <div>3 3</div> <div>4 4</div>	2. $\begin{array}{r} 130 \\ \times 21 \\ \hline 2730 \end{array}$  <div>1 2</div> <div>2 5</div> <div>3 8</div> <div>4 11</div>	3. $5\frac{4}{6} - 2\frac{1}{2} =$ $3\frac{1}{6} \text{ or equivalent}$  <div>1 3</div> <div>2 6</div> <div>3 9</div>	4. $\begin{array}{r} 725 \\ \times 85 \\ \hline 61625 \end{array}$  <div>1 2</div> <div>2 5</div> <div>3 8</div> <div>4 11</div> <div>5 14</div>
5. $86 \overline{)6536}$  <div>1 6</div> <div>2 12</div>	6. $9 \overline{)816}$  <div>1 3</div> <div>2 6</div> <div>3 9</div>	7. $5\frac{2}{4} - 1\frac{1}{4} =$ $4\frac{1}{4}$  <div>1 1</div> <div>2 2</div> <div>3 3</div>	8. $\frac{1}{4} + \frac{2}{4} =$ $\frac{3}{4}$  <div>1 1</div> <div>2 2</div>
9. $\begin{array}{r} 7118 \\ - 589 \\ \hline 6529 \end{array}$  <div>1 1</div> <div>2 2</div> <div>3 3</div> <div>4 4</div>	10. $\begin{array}{r} 374 \\ \times 6 \\ \hline 2244 \end{array}$  <div>1 1</div> <div>2 2</div> <div>3 3</div> <div>4 4</div>	11. $23 \overline{)575}$  <div>1 5</div> <div>2 11</div>	12. $\frac{6}{10} + \frac{3}{8} =$ $\frac{39}{40} \text{ or equivalent}$  <div>1 2</div> <div>2 4</div> <div>3 6</div> <div>4 8</div>
13. $34 \overline{)1700}$  <div>1 4</div> <div>2 9</div>	14. $\begin{array}{r} 893 \\ \times 11 \\ \hline 9823 \end{array}$  <div>1 2</div> <div>2 5</div> <div>3 8</div> <div>4 11</div>	15. $6\frac{1}{2} + 3\frac{8}{9} =$ $10\frac{7}{18} \text{ only (12)}$ OR $9\frac{25}{18} \text{ or equivalent}$  <div>1 2</div> <div>2 4</div> <div>3 6</div> <div>4 8</div> <div>5 11</div>	16. $\begin{array}{r} 529 \\ \times 82 \\ \hline 43378 \end{array}$  <div>1 2</div> <div>2 5</div> <div>3 8</div> <div>4 11</div> <div>5 14</div>

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Problems	Skills Assessed
1	Add two four-digit numbers, with renaming from ones to tens, tens to hundreds, and hundreds to thousands.
9	Subtract a three-digit number from a four-digit number, with renaming from tens to ones, hundreds to tens, and thousands to hundreds.
8	Add or subtract two fractions with common denominators. Denominators must be 2, 3, 4, 5, or 10.
7	Add or subtract two mixed numbers with common denominators. Denominators must be 2, 3, 4, 5, or 10.
6	Divide a three-digit dividend by a one-digit divisor, where the divisor evenly goes into the first one or two digits of the dividend, resulting in a quotient and a remainder.
10	Multiply a one-digit number by a three-digit number, with renaming from ones to tens and tens to hundreds.
2, 14	Multiply a two-digit number by a three-digit number, without renaming.
4, 16	Multiply a two-digit number by a three-digit number.

Problems	Skills Assessed
11	Divide a three-digit dividend by a two-digit divisor, without a remainder.
13	Divide a four-digit dividend by a two-digit divisor, where the divisor evenly goes into the first two or three digits of the dividend, resulting in a two-digit quotient and no remainder.
5	Divide a four-digit dividend by a two-digit divisor, where the divisor does not evenly go into the first two or three digits of the dividend, resulting in a two-digit quotient and no remainder.
12	Add or subtract two fractions with unlike denominators.
3, 15	Add or subtract two mixed numbers with unlike denominators.

Acadience™ Math / Computation Grade 5 Benchmark 1 / Form B / Teacher Key

of digits correct
in the final answer | score

Scoring Direction

←
Right to Left
or
→
Left to Right

1. $\begin{array}{r} 4264 \\ +1978 \\ \hline 6242 \end{array}$ ← <div><div>1</div><div>2</div><div>3</div><div>4</div></div> <div><div>1</div><div>2</div><div>3</div><div>4</div></div>	2. $\begin{array}{r} 674 \\ \times 11 \\ \hline 7414 \end{array}$ ← <div><div>1</div><div>2</div><div>3</div><div>4</div></div> <div><div>2</div><div>5</div><div>8</div><div>11</div></div>	3. $7\frac{4}{7} - 3\frac{1}{2} =$ ← $4\frac{1}{14}$ or equivalent <div><div>1</div><div>2</div><div>3</div><div>4</div></div> <div><div>2</div><div>4</div><div>7</div><div>10</div></div>	4. $\begin{array}{r} 968 \\ \times 54 \\ \hline 52272 \end{array}$ ← <div><div>1</div><div>2</div><div>3</div><div>4</div><div>5</div></div> <div><div>2</div><div>5</div><div>8</div><div>11</div><div>14</div></div>
5. $\begin{array}{r} 84 \\ 54 \overline{)4536} \end{array}$ → <div><div>1</div><div>2</div></div> <div><div>6</div><div>12</div></div>	6. $\begin{array}{r} 445r1 \\ 2 \overline{)891} \end{array}$ → <div><div>1</div><div>2</div><div>3</div><div>4</div></div> <div><div>3</div><div>6</div><div>9</div><div>13</div></div>	7. $5\frac{2}{5} + 1\frac{2}{5} =$ ← $6\frac{4}{5}$ <div><div>1</div><div>2</div><div>3</div></div> <div><div>1</div><div>2</div><div>3</div></div>	8. $\frac{8}{10} - \frac{6}{10} =$ $\frac{1}{5}$ only (4) OR $\frac{2}{10}$ <div><div>1</div><div>2</div><div>3</div></div> <div><div>1</div><div>2</div><div>3</div></div>
9. $\begin{array}{r} 8640 \\ - 864 \\ \hline 7776 \end{array}$ ← <div><div>1</div><div>2</div><div>3</div><div>4</div></div> <div><div>1</div><div>2</div><div>3</div><div>4</div></div>	10. $\begin{array}{r} 892 \\ \times 6 \\ \hline 5352 \end{array}$ ← <div><div>1</div><div>2</div><div>3</div><div>4</div></div> <div><div>1</div><div>2</div><div>3</div><div>4</div></div>	11. $\begin{array}{r} 12 \\ 58 \overline{)696} \end{array}$ → <div><div>1</div><div>2</div></div> <div><div>5</div><div>11</div></div>	12. $\frac{1}{9} + \frac{7}{12} =$ ← $\frac{25}{36}$ or equivalent <div><div>1</div><div>2</div><div>3</div><div>4</div></div> <div><div>2</div><div>4</div><div>6</div><div>8</div></div>
13. $\begin{array}{r} 50 \\ 69 \overline{)3450} \end{array}$ → <div><div>1</div><div>2</div></div> <div><div>4</div><div>9</div></div>	14. $\begin{array}{r} 583 \\ \times 10 \\ \hline 5830 \end{array}$ ← <div><div>1</div><div>2</div><div>3</div><div>4</div></div> <div><div>2</div><div>5</div><div>8</div><div>11</div></div>	15. $8\frac{2}{4} - 2\frac{3}{5} =$ $5\frac{9}{10}$ only (14) OR $5\frac{18}{20}$ only OR $5\frac{9}{10}$ only (13) OR $\frac{118}{20}$ or equivalent <div><div>1</div><div>2</div><div>3</div><div>4</div><div>5</div></div> <div><div>2</div><div>4</div><div>6</div><div>9</div><div>12</div></div>	16. $\begin{array}{r} 356 \\ \times 45 \\ \hline 16020 \end{array}$ ← <div><div>1</div><div>2</div><div>3</div><div>4</div><div>5</div></div> <div><div>2</div><div>5</div><div>8</div><div>11</div><div>14</div></div>

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Acadience™ Math / Computation Grade 5

Benchmark 2 / Form A / Teacher Key

of digits correct in the final answer | score

Scoring Direction
 Right to Left
 or
 Left to Right

1. $\begin{array}{r} 7293 \\ +1928 \\ \hline 9221 \end{array}$  <div>1 1 2 2 3 3 4 4</div>	2. $\begin{array}{r} 401 \\ \times 12 \\ \hline 4812 \end{array}$  <div>1 2 2 5 3 8 4 11</div>	3. $7\frac{2}{4} + 1\frac{5}{8} =$ $9\frac{1}{8} \text{ only (10)}$ OR $\begin{array}{r} 9 \\ \underline{8} \\ 1 \end{array}$  or equivalent <div>1 3 2 6 3 9</div>	4. $\begin{array}{r} 869 \\ \times 37 \\ \hline 32153 \end{array}$  <div>1 2 2 5 3 8 4 11 5 14</div>
5. $29 \overline{)2668}$  <div>1 5 2 10</div>	6. $3 \overline{)304} \text{ r1}$  <div>1 2 2 5 3 8 4 11</div>	7. $2\frac{1}{4} + 1\frac{1}{4} =$ $3\frac{1}{2} \text{ only (4)}$ OR $\begin{array}{r} 3 \\ \underline{2} \\ 1 \end{array}$  <div>1 1 2 2 3 3</div>	8. $\frac{2}{3} - \frac{1}{3} =$  <div>1 1 2 2</div>
9. $\begin{array}{r} 9335 \\ - 668 \\ \hline 8667 \end{array}$  <div>1 1 2 2 3 3 4 4</div>	10. $\begin{array}{r} 747 \\ \times 3 \\ \hline 2241 \end{array}$  <div>1 1 2 2 3 3 4 4</div>	11. $30 \overline{)960}$  <div>1 4 2 9</div>	12. $\frac{6}{9} - \frac{4}{8} =$ $\frac{1}{6} \text{ only (9)}$ OR $\begin{array}{r} 12 \\ \underline{6} \\ 6 \end{array}$  or equivalent <div>1 2 2 4 3 6 4 8</div>
13. $66 \overline{)2640}$  <div>1 4 2 9</div>	14. $\begin{array}{r} 968 \\ \times 11 \\ \hline 10648 \end{array}$  <div>1 2 2 4 3 6 4 9 5 12</div>	15. $7\frac{3}{7} + 2\frac{1}{2} =$ $9\frac{13}{14} \text{ or equivalent}$  <div>1 2 2 4 3 6 4 8 5 11</div>	16. $\begin{array}{r} 673 \\ \times 74 \\ \hline 49802 \end{array}$  <div>1 2 2 5 3 8 4 11 5 14</div>

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Acadience™ Math / Computation Grade 5 Benchmark 2 / Form B / Teacher Key

of digits correct
in the final answer | score

Scoring Direction

←
Right to Left
or
→
Left to Right

1. $\begin{array}{r} 5199 \\ +2847 \\ \hline 8046 \end{array}$ ← <div><div>1</div><div>2</div><div>3</div><div>4</div></div> <div><div>1</div><div>2</div><div>3</div><div>4</div></div>	2. $\begin{array}{r} 320 \\ \times 20 \\ \hline 6400 \end{array}$ ← <div><div>1</div><div>2</div><div>3</div><div>4</div></div> <div><div>2</div><div>5</div><div>8</div><div>11</div></div>	3. $5\frac{2}{5} + 1\frac{6}{10} =$ 7 only (12) OR $\begin{array}{r} 6\frac{10}{10} \text{ or } \\ \leftarrow \text{equivalent} \end{array}$ <div><div>1</div><div>2</div><div>3</div><div>4</div><div>5</div></div> <div><div>2</div><div>4</div><div>6</div><div>8</div><div>11</div></div>	4. $\begin{array}{r} 724 \\ \times 35 \\ \hline 25340 \end{array}$ ← <div><div>1</div><div>2</div><div>3</div><div>4</div><div>5</div></div> <div><div>2</div><div>5</div><div>8</div><div>11</div><div>14</div></div>
5. $\begin{array}{r} 58 \\ 74 \overline{)4292} \end{array}$ → <div><div>1</div><div>2</div></div> <div><div>6</div><div>12</div></div>	6. $\begin{array}{r} 21r1 \\ 7 \overline{)148} \end{array}$ → <div><div>1</div><div>2</div><div>3</div></div> <div><div>3</div><div>6</div><div>9</div></div>	7. $8\frac{4}{5} - 3\frac{1}{5} =$ $\begin{array}{r} 3 \\ 5 \overline{)5} \end{array}$ <div><div>1</div><div>2</div><div>3</div></div> <div><div>1</div><div>2</div><div>3</div></div>	8. $\frac{7}{10} - \frac{3}{10} =$ $\frac{2}{5} \text{ only (4)}$ OR $\begin{array}{r} 4 \\ 10 \overline{)40} \end{array}$ <div><div>1</div><div>2</div><div>3</div></div> <div><div>1</div><div>2</div><div>3</div></div>
9. $\begin{array}{r} 9547 \\ - 769 \\ \hline 8778 \end{array}$ ← <div><div>1</div><div>2</div><div>3</div><div>4</div></div> <div><div>1</div><div>2</div><div>3</div><div>4</div></div>	10. $\begin{array}{r} 675 \\ \times 2 \\ \hline 1350 \end{array}$ ← <div><div>1</div><div>2</div><div>3</div><div>4</div></div> <div><div>1</div><div>2</div><div>3</div><div>4</div></div>	11. $\begin{array}{r} 4 \\ 59 \overline{)236} \end{array}$ → <div><div>1</div><div>5</div></div>	12. $\frac{1}{6} + \frac{5}{9} =$ $\frac{13}{18} \text{ or } \frac{13}{18} \text{ equivalent}$ <div><div>1</div><div>2</div><div>3</div><div>4</div></div> <div><div>2</div><div>4</div><div>6</div><div>8</div></div>
13. $\begin{array}{r} 40 \\ 40 \overline{)1600} \end{array}$ → <div><div>1</div><div>2</div></div> <div><div>4</div><div>9</div></div>	14. $\begin{array}{r} 927 \\ \times 11 \\ \hline 10197 \end{array}$ ← <div><div>1</div><div>2</div><div>3</div><div>4</div><div>5</div></div> <div><div>2</div><div>4</div><div>6</div><div>9</div><div>12</div></div>	15. $5\frac{2}{3} + 3\frac{3}{9} =$ 9 only (10) OR $\begin{array}{r} 9 \\ 8 \overline{)9} \text{ or } \\ \leftarrow \text{equivalent} \end{array}$ <div><div>1</div><div>2</div><div>3</div><div>5</div></div> <div><div>3</div><div>6</div><div>9</div><div>9</div></div>	16. $\begin{array}{r} 756 \\ \times 26 \\ \hline 19656 \end{array}$ ← <div><div>1</div><div>2</div><div>3</div><div>4</div><div>5</div></div> <div><div>2</div><div>5</div><div>8</div><div>11</div><div>14</div></div>

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Acadience™ Math / Computation Grade 5 Benchmark 3 / Form A / Teacher Key

of digits correct in the final answer | score

Scoring Direction

 Right to Left
 or

 Left to Right

1. $\begin{array}{r} 6529 \\ +2983 \\ \hline 9512 \end{array}$  <div>1 1</div> <div>2 2</div> <div>3 3</div> <div>4 4</div>	2. $\begin{array}{r} 725 \\ \times 11 \\ \hline 7975 \end{array}$  <div>1 2</div> <div>2 5</div> <div>3 8</div> <div>4 11</div>	3. $9\frac{1}{2} - 5\frac{8}{10} =$ $3\frac{7}{10} \text{ only (15)}$ OR $\frac{37}{10} \text{ or equivalent}$ <div>1 3</div> <div>2 6</div> <div>3 10</div> <div>4 14</div>	4. $\begin{array}{r} 427 \\ \times 79 \\ \hline 33733 \end{array}$  <div>1 2</div> <div>2 5</div> <div>3 8</div> <div>4 11</div> <div>5 14</div>
5. $62 \overline{)6076}$ $\begin{array}{r} 98 \\ 62 \overline{)6076} \end{array}$  <div>1 6</div> <div>2 12</div>	6. $5 \overline{)102r4}$ $\begin{array}{r} 102r4 \\ 5 \overline{)102r4} \end{array}$  <div>1 2</div> <div>2 5</div> <div>3 8</div> <div>4 11</div>	7. $7\frac{3}{10} + 2\frac{2}{10} =$ $9\frac{1}{2} \text{ only (5)}$ OR $\frac{95}{10}$ <div>1 1</div> <div>2 2</div> <div>3 3</div> <div>4 4</div>	8. $\frac{3}{4} - \frac{1}{4} =$ $\frac{1}{2} \text{ only (3)}$ OR $\frac{2}{4}$ <div>1 1</div> <div>2 2</div>
9. $\begin{array}{r} 2146 \\ -297 \\ \hline 1849 \end{array}$  <div>1 1</div> <div>2 2</div> <div>3 3</div> <div>4 4</div>	10. $\begin{array}{r} 592 \\ \times 7 \\ \hline 4144 \end{array}$  <div>1 1</div> <div>2 2</div> <div>3 3</div> <div>4 4</div>	11. $89 \overline{)623}$  <div>1 5</div>	12. $\frac{4}{7} + \frac{7}{9} =$ $1\frac{22}{63} \text{ only (9)}$ OR $\frac{85}{63} \text{ or equivalent}$ <div>1 2</div> <div>2 4</div> <div>3 6</div> <div>4 8</div>
13. $89 \overline{)3560}$ $\begin{array}{r} 40 \\ 89 \overline{)3560} \end{array}$  <div>1 4</div> <div>2 9</div>	14. $\begin{array}{r} 311 \\ \times 33 \\ \hline 10263 \end{array}$  <div>1 2</div> <div>2 4</div> <div>3 6</div> <div>4 9</div> <div>5 12</div>	15. $6\frac{1}{4} + 3\frac{1}{3} =$ $9\frac{7}{12} \text{ or equivalent}$ <div>1 2</div> <div>2 4</div> <div>3 7</div> <div>4 10</div>	16. $\begin{array}{r} 276 \\ \times 47 \\ \hline 12972 \end{array}$  <div>1 2</div> <div>2 5</div> <div>3 8</div> <div>4 11</div> <div>5 14</div>

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Acadience™ Math / Computation Grade 5 Benchmark 3 / Form B / Teacher Key

of digits correct
in the final answer | score

Scoring Direction

 Right to Left
 or

 Left to Right

1. $\begin{array}{r} 4977 \\ + 3756 \\ \hline 8733 \end{array}$  <div>1 1 2 2 3 3 4 4</div>	2. $\begin{array}{r} 243 \\ \times 20 \\ \hline 4860 \end{array}$  <div>1 2 2 5 3 8 4 11</div>	3. $8 \frac{6}{8} + 1 \frac{1}{2} =$ $10 \frac{1}{4} \text{ only (12)}$ OR $9 \frac{5}{4} \text{ only OR } 10 \frac{2}{8} \text{ only (11)}$ OR $9 \frac{10}{8} \text{ or } 10 \frac{2}{8} \text{ equivalent}$ <div>1 2 2 4 3 7 4 10</div>	4. $\begin{array}{r} 434 \\ \times 65 \\ \hline 28210 \end{array}$  <div>1 2 2 5 3 8 4 11 5 14</div>
5. $\begin{array}{r} 38 \\ 45 \overline{)1710} \end{array}$  <div>1 6 2 12</div>	6. $\begin{array}{r} 50r4 \\ 5 \overline{)254} \end{array}$  <div>1 3 2 6 3 9</div>	7. $7 \frac{1}{4} + 2 \frac{2}{4} =$  <div>1 1 2 2 3 3</div>	8. $\frac{3}{5} + \frac{1}{5} =$  <div>1 1 2 2</div>
9. $\begin{array}{r} 5701 \\ - 895 \\ \hline 4806 \end{array}$  <div>1 1 2 2 3 3 4 4</div>	10. $\begin{array}{r} 892 \\ \times 7 \\ \hline 6244 \end{array}$  <div>1 1 2 2 3 3 4 4</div>	11. $\begin{array}{r} 15 \\ 64 \overline{)960} \end{array}$  <div>1 5 2 11</div>	12. $\frac{8}{10} + \frac{6}{7} =$ $1 \frac{23}{35} \text{ only (11)}$ OR $\frac{58}{35} \text{ only OR } 1 \frac{46}{70} \text{ only (10)}$ OR $1 \frac{116}{70} \text{ or } 1 \frac{58}{35} \text{ equivalent}$ <div>1 1 2 3 3 5 4 7 5 9</div>
13. $\begin{array}{r} 80r20 \\ 22 \overline{)1780} \end{array}$  <div>1 3 2 6 3 9 4 12</div>	14. $\begin{array}{r} 466 \\ \times 10 \\ \hline 4660 \end{array}$  <div>1 2 2 5 3 8 4 11</div>	15. $3 \frac{2}{4} + 1 \frac{1}{2} =$ 5 only (10) OR $4 \frac{4}{4} \text{ or } 5 \text{ equivalent}$ <div>1 3 2 6 3 9</div>	16. $\begin{array}{r} 832 \\ \times 87 \\ \hline 72384 \end{array}$  <div>1 2 2 5 3 8 4 11 5 14</div>

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