## REFERENCE PAGE OF REASONING STRATEGIES AND AUTOMATICITIES

| SEVEN SIGNIFICANT <br> REASONING STRATEGIES | RELEVANT OPERATIONS |
| :--- | :--- |
| 1. Count On/Count Back | Addition and subtraction |
| 2. Make Tens | Addition |
| 3. Use Partials | Addition, subtraction, multiplication, and division |
| 4. Break Apart to Multiply | Multiplication |
| 5. Halve and Double | Addition, subtraction, and multiplication |
| 6. Compensation | Subtraction and division |
| 7. Use an Inverse Relationship | RUTOMATICITIES |
| RELEVANT OPERATIONS |  |
| Basic facts | Addition, subtraction, multiplication, and division |
| Breaking apart all numbers through 10 | Addition and subtraction and subtraction |
| Base-10 combinations | Multiplication and division |
| Using 25s | Multiplication and division |
| Using 15s and 30s | Multiplication |
| Doubling | Division |
| Halving | Addition, subtraction, multiplication, and division |
| Fraction equivalents within fraction families subtraction, multiplication, and division |  |
| Conversions between common decimals and fractions | Addition |
| A |  |

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[^0]:    Retrieved from the companion website for Figuring Out Fluency in Mathematics Teaching and Learning, Grades K-8: Moving Beyond Basic Facts and Memorization by Jennifer M. Bay-Williams and John J. SanGiovanni. Thousand Oaks, CA: Corwin, www.corwin.com. Copyright © 2021 by Corwin Press, Inc. All rights reserved. Reproduction authorized for educational use by educators, local school sites, and/or noncommercial or nonprofit entities that have purchased the book.

