



Grade	Addition	Subtraction	Multiplication
1	<ul style="list-style-type: none"> ▪ Use words, pictures, and numbers to represent addition ▪ Develop & apply strategies, including counting on & doubling for addition facts to at least 12 ▪ Explain strategies or procedures used to determine sums ▪ Add coin values 	<ul style="list-style-type: none"> ▪ Use words, pictures, and numbers to represent subtraction ▪ Use concrete models & diagrams to show the relationships between addition & subtraction ▪ Develop & apply strategies, including counting backwards for subtraction facts to at least 10 	<ul style="list-style-type: none"> ▪ Recognize number patterns ▪ Count by 2's, 5's, and 10's
2	<ul style="list-style-type: none"> ▪ Use words, pictures, and numbers to represent addition ▪ Develop & apply strategies, including counting on, doubles, neighbors, fast 10's, and fast 9's for addition facts to 20 ▪ Develop fact automaticity ▪ Explain strategies or procedures used to determine sums ▪ Apply mental math strategies, including composing & decomposing numbers to compute with numbers through 100 ▪ Add 2-digit numbers and explain the procedures used 	<ul style="list-style-type: none"> ▪ Use words, pictures, and numbers to represent subtraction ▪ Use concrete models, diagrams, and words to show the relationships between addition & subtraction ▪ Develop & apply strategies, including counting backwards, halving, subtracting 0's, 1's, 2's, and 10's for subtraction facts to 20 ▪ Explain strategies or procedures used to determine differences ▪ Subtract 2-digit numbers and explain the procedures used 	<ul style="list-style-type: none"> ▪ Count by 5's, 10's, and 25's

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Grade	Addition	Subtraction	Multiplication	Division
3	<ul style="list-style-type: none"> Apply a variety of strategies for addition facts to 20 Explain and apply a variety of strategies to add 2- and 3-digit numbers Estimate the results of adding 2- and 3-digit numbers 	<ul style="list-style-type: none"> Apply a variety of strategies for subtraction facts to 20 Develop fact automaticity Explain and apply a variety of strategies to subtract 2- and 3-digit numbers Estimate the results of subtracting 2- and 3-digit numbers 	<ul style="list-style-type: none"> Use words, pictures, visual models and numbers to represent multiplication Use models, words, and/or numbers to demonstrate an understanding of multiplication as repeated addition, equal groups of objects, arrays, or skip counting Develop & apply a variety of strategies for solving multiplication facts through 10×10 	<ul style="list-style-type: none"> Use words, pictures, visual models and numbers to represent division Use models, diagrams, and words to show and explain the inverse relationship between multiplication & division
4	<ul style="list-style-type: none"> Explain and apply a variety of strategies to add multi-digit numbers Estimate the results of adding multi-digit numbers Use concrete models to add fractions with like and unlike denominators 	<ul style="list-style-type: none"> Explain and apply a variety of strategies to subtract multi-digit numbers Estimate the results of subtracting multi-digit numbers Use concrete models to subtract fractions with like and unlike denominators 	<ul style="list-style-type: none"> Develop & apply a variety of strategies that help with recall of multiplication facts through 12's Develop fact automaticity Explain and apply strategies or use procedures to multiply 2-digit numbers by 1- and 2-digit numbers 	<ul style="list-style-type: none"> Develop & apply a variety of strategies that help with recall of division facts through 12's Develop fact automaticity Explain and apply strategies or use procedures to divide 2- and 3-digit numbers by 1-digit numbers Apply and explain the concept of a remainder in a given context

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5	<ul style="list-style-type: none"> Add multi-digit numbers Use manipulatives, pictures, visual models, and numbers to represent and add fractions with like and unlike denominators Uses manipulatives, pictures, visual models, and numbers to add decimals to hundredths 	<ul style="list-style-type: none"> Subtract multi-digit numbers Use manipulatives, pictures, visual models, and numbers to represent and subtract fractions with like and unlike denominators Use manipulatives, pictures, visual models, and numbers to subtract decimals to hundredths 	<ul style="list-style-type: none"> Develop & apply a variety of strategies that help with recall of multiplication facts through 12's Develop fact automaticity Multiply 2- and 3-digit numbers by 1- and 2-digit numbers 	<ul style="list-style-type: none"> Develop & apply a variety of strategies that help with recall of division facts through 12's Develop fact automaticity Divide 2- and 3-digit numbers by 1- and 2-digit numbers, with and without remainders
6	<ul style="list-style-type: none"> Add multi-digit numbers Use manipulatives, pictures, visual models, and numbers to represent and add fractions with like and unlike denominators Use manipulatives, pictures, visual models, and numbers to add decimals to hundredths 	<ul style="list-style-type: none"> Subtract multi-digit numbers Use manipulatives, pictures, visual models, and numbers to represent and subtract fractions with like and unlike denominators Use manipulatives, pictures, visual models, and numbers to subtract decimals to hundredths 	<ul style="list-style-type: none"> Develop & apply a variety of strategies that help with recall of multiplication facts through 12's Develop fact automaticity Multiply 2- and 3-digit numbers by 1- and 2-digit numbers 	<ul style="list-style-type: none"> Develop & apply a variety of strategies that help with recall of division facts through 12's Develop fact automaticity Divide 2- and 3-digit numbers by 1- and 2-digit numbers, with and without remainders

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