

The Quarter Mile™ Math Practice Software

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Topics are correlated to the **NCTM** Standards

Level 1 = Grades K-3

Level 2 = Grades 4-6

Level 3 = Grades 6-9



Topic List



NCTM Standards



Three “Levels”
sold in seven
different grade
ranges

(See “Product List” on
next pages)

Numbers and letters

Keyboarding topics

✓			Keyboarding: one-digit numbers	<i>Not in the standards</i>
✓			Keyboarding: two-digit numbers	<i>Not in the standards</i>
✓			Keyboarding: the alphabet	<i>Not in the standards</i>
✓			Double consonants	<i>Not in the standards</i>

Learning the alphabet topics

✓			Find the next letter: A, B, ?	<i>Not in the standards</i>
✓			Find the second letter after	<i>Not in the standards</i>
✓			Find the previous letter	<i>Not in the standards</i>
✓			Vowel or consonant?	<i>Not in the standards</i>

Counting topics

✓			Counting forward: level 1	<i>NOS.I.PreK-2.A</i>
✓			Counting forward: level 2	<i>NOS.I.PreK-2.A</i>
✓			Counting backward: level 1	<i>NOS.I.PreK-2.A</i>
✓			Counting backward: level 2	<i>NOS.I.PreK-2.A</i>
✓			Counting by 2, 3, 5, 10	<i>ALG.I.PreK-2.B; ALG.I.3-5.A</i>
✓			Counting by 4, 6, 7, 8, 9	<i>ALG.I.PreK-2.B; ALG.I.3-5.A</i>

Numbers topics

✓			Words to numerals	<i>NOS.I.PreK-2.E</i>
✓			Greater than / less than: level 1	<i>NOS.I.PreK-2.C; NOS.I.3-5.A</i>
✓			Greater than / less than: level 2	<i>NOS.I.PreK-2.C; NOS.I.3-5.A</i>
✓			Find the largest number: level 1	<i>NOS.I.PreK-2.C; NOS.I.3-5.A</i>
✓			Find the largest number: level 2	<i>NOS.I.PreK-2.C; NOS.I.3-5.A</i>
✓			Make the smallest number	<i>NOS.I.PreK-2.C; NOS.I.3-5.A</i>
✓			Make the largest number	<i>NOS.I.PreK-2.C; NOS.I.3-5.A</i>
✓			Even and odd?	<i>Beyond the NCTM Standards</i>

Place value topics

✓			Ones, tens, hundreds and up	<i>NOS.I.PreK-2.B; NOS.I.3-5.A</i>
✓			Naming column headings	<i>NOS.I.PreK-2.B; NOS.I.3-5.A</i>

Whole Numbers

Grouping / regrouping topics

✓			Regrouping: level 1	<i>NOS.I.PreK-2.D; NOS.I.3-5.B</i>
✓			Regrouping: level 2	<i>NOS.I.PreK-2.D; NOS.I.3-5.B</i>
✓			Grouping	<i>NOS.I.PreK-2.D; NOS.I.3-5.B</i>

Doubling / halving topics

✓			Doubling: level 1	<i>NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B</i>
✓			Doubling: level 2	<i>NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B</i>
✓			Halving: level 1	<i>NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B</i>
✓			Halving: level 2	<i>NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B</i>

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The Quarter Mile Math: Levels 1, 2, and 3 Bundle
The Quarter Mile Math: Cross-Section of Topics

Product List



Level 1 = Grades K-3
Level 2 = Grades 4-6
Level 3 = Grades 6-9

			Twins and neighbors topics	NCTM Standards
✓			Adding twins and neighbors: level 1	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Adding twins and neighbors: level 2	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Sub twins and neighbors: level 1	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Sub twins and neighbors: level 2	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
			Addition topics	
✓			Adding 0's	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Adding 1's	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Adding 2's	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Adding 3's	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Adding 4's	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Adding 5's	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Adding 6's	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Adding 7's	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Adding 8's	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Adding 9's	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Adding 10's	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Addition: 0 + 0 through 1 + 1	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Addition: 0 + 0 through 2 + 2	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Addition: 0 + 0 through 3 + 3	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Addition: 0 + 0 through 4 + 4	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓	✓		Addition: 0 + 0 through 5 + 5	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Addition: 0 + 0 through 6 + 6	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Addition: 0 + 0 through 7 + 7	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Addition: 0 + 0 through 8 + 8	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Addition: 0 + 0 through 9 + 9	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓	✓		Addition: 0 + 0 through 10 + 10	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓	✓		Addition: 0 + 0 through 20 + 20	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓	✓		Addition: 0 + 0 through 200 + 90	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
			Subtraction topics	
✓			Subtracting 0's	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Subtracting 1's	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Subtracting 2's	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Subtracting 3's	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Subtracting 4's	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Subtracting 5's	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Subtracting 6's	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Subtracting 7's	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Subtracting 8's	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Subtracting 9's	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Subtracting 10's	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Subtraction: 0 - 0 through 2 - 1	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Subtraction: 0 - 0 through 4 - 2	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Subtraction: 0 - 0 through 6 - 3	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Subtraction: 0 - 0 through 8 - 4	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓	✓		Subtraction: 0 - 0 through 10 - 5	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Subtraction: 0 - 0 through 12 - 6	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Subtraction: 0 - 0 through 14 - 7	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Subtraction: 0 - 0 through 16 - 8	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓			Subtraction: 0 - 0 through 18 - 9	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓	✓		Subtraction: 0 - 0 through 20 - 10	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓	✓		Subtraction: 0 - 0 through 20 - 20	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓	✓		Subtraction: 0 - 0 through 200 - 200	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B

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Product List



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			Multiplication topics	NCTM Standards
✓	✓		Multiplication: 1's tables	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Multiplication: 2's tables	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Multiplication: 3's tables	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Multiplication: 4's tables	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Multiplication: 5's tables	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Multiplication: 6's tables	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Multiplication: 7's tables	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Multiplication: 8's tables	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Multiplication: 9's tables	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Multiplication: 10's tables	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Multiplication: 11's tables	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Multiplication: 12's tables	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Multiplication: 0 x 0 through 2 x 2	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Multiplication: 0 x 0 through 3 x 3	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Multiplication: 0 x 0 through 4 x 4	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Multiplication: 0 x 0 through 5 x 5	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Multiplication: 0 x 0 through 6 x 6	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Multiplication: 0 x 0 through 7 x 7	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Multiplication: 0 x 0 through 8 x 8	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Multiplication: 0 x 0 through 9 x 9	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Multiplication: 1 x 1 through 10 x 10	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Multiplication: 1 x 1 through 11 x 11	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Multiplication: 1 x 1 through 12 x 12	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Multiplication: 2 x 2 through 25 x 25	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
			Division topics	
✓	✓		Dividing by 1's	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Dividing by 2's	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Dividing by 3's	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Dividing by 4's	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Dividing by 5's	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Dividing by 6's	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Dividing by 7's	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Dividing by 8's	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Dividing by 9's	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Dividing by 10's	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Dividing by 11's	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Dividing by 12's	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Division: 0 ÷ 1 through 4 ÷ 2	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Division: 0 ÷ 1 through 9 ÷ 3	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Division: 0 ÷ 1 through 16 ÷ 4	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Division: 0 ÷ 1 through 25 ÷ 5	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Division: 0 ÷ 1 through 36 ÷ 6	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Division: 0 ÷ 1 through 49 ÷ 7	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Division: 0 ÷ 1 through 64 ÷ 8	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Division: 0 ÷ 1 through 81 ÷ 9	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Division: 4 ÷ 2 through 100 ÷ 10	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Division: 4 ÷ 2 through 121 ÷ 11	NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Division: 4 ÷ 2 through 144 ÷ 12	NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Division: 4 ÷ 2 through 200 ÷ 20	NOS.III.3-5.A; NOS.III.3-5.B

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			Combination facts topics	NCTM Standards
✓	✓		Add and sub through the 10's	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓	✓		Mul and div through the 10's	NOS.II.PreK-2.C; NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Add / sub / mul / div combination	NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Mixed operations (2 + 3 x 4 - 1)	NOS.III.3-5.A; NOS.III.3-5.B
			Important 10's facts topics	
✓	✓		Making 10's with two numbers	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓	✓		10 minus	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓	✓		Making 10's with three numbers	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓	✓		Two numbers subtracted from 10	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
			Missing number topics	
✓			Missing number: adding	ALG.III.PreK-2.A; ALG.III.3-5.A
✓			Missing number: subtracting	ALG.III.PreK-2.A; ALG.III.3-5.A
✓			Missing number: multiplying	ALG.III.3-5.A
✓			Missing number: dividing	ALG.III.3-5.A
✓			Missing number: combination	ALG.III.3-5.A
			Missing operator / operators topics	
✓	✓		One operator: add / sub	ALG.III.PreK-2.A; ALG.III.3-5.A
✓	✓		One operator: add / sub / mul / div	ALG.III.3-5.A
✓	✓		Two operators: add / sub	ALG.III.PreK-2.A; ALG.III.3-5.A
✓	✓		Two operators: add / sub / mul	ALG.III.3-5.A
			Rounding topics	
✓	✓		Rounding to the nearest 10	NOS.III.PreK-2.A; NOS.III.3-5.C
✓	✓		Rounding to the nearest 100	NOS.III.PreK-2.A; NOS.III.3-5.C
✓	✓		Rounding to the nearest 1000	NOS.III.PreK-2.A; NOS.III.3-5.C
			Powers of 10 topics	
	✓		The basics (no exponents)	NOS.I.3-5.A; NOS.I.6-8.E
	✓		Exponent equivalent	NOS.I.6-8.E
	✓		Multiplying with exponents	NOS.I.6-8.E
	✓		Find the exponent: mul	NOS.I.6-8.E
	✓		Find the exponent: mul / div	NOS.I.6-8.E
	✓		Identifying big numbers	NOS.I.6-8.E
			Squares topics	
✓	✓		Squares through 12 x 12	NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Squares through 20 x 20	NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Squares through 25 x 25	NOS.III.3-5.A; NOS.III.3-5.B
	✓		Exponents	NOS.I.6-8.E
			Mean (average), mode, median	
	✓		Mean: level 1	DAS.II.3-5.B; DAS.II.6-8.A
	✓		Mean: level 2	DAS.II.3-5.B; DAS.II.6-8.A
	✓		Mean: level 3	DAS.II.3-5.B; DAS.II.6-8.A
	✓		Mean, mode, and median	DAS.II.3-5.B; DAS.II.6-8.A
			Bases 2 and base 16 topics	
	✓		Base 10 to base 2	Beyond the NCTM Standards
	✓		Base 2 to base 10	Beyond the NCTM Standards
	✓		Base 10 and 16: equivalent	Beyond the NCTM Standards
	✓		Base 10 to base 16	Beyond the NCTM Standards
	✓		Base 16 to base 10	Beyond the NCTM Standards

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Product List

Fraction Introduction

Divisibility, prime number topics

Level 1	Level 2	Level 3	Topic	NCTM Standards
✓			Divisibility by 2, 3 and 5	NOS.1.3-5.G; NOS.1.6-8.F
✓			Divisibility by 2, 3, 4, 5 and 6	NOS.1.3-5.G; NOS.1.6-8.F
✓			Prime numbers	NOS.1.3-5.G; NOS.1.6-8.F

GCF, LCM and LCD topics

✓			Greatest common factor	NOS.1.3-5.G; NOS.1.6-8.F
✓			Greatest common factor: advanced	NOS.1.3-5.G; NOS.1.6-8.F
✓			Least common multiple	NOS.1.3-5.G; NOS.1.6-8.F
✓			Least common multiple: advanced	NOS.1.3-5.G; NOS.1.6-8.F
✓			Least common denominator	NOS.1.3-5.E; NOS.1.6-8.B
✓			Least common denominator: advanced	NOS.1.3-5.E; NOS.1.6-8.B

Reducing, converting, etc. topics

✓			Reducing fractions	NOS.1.3-5.E; NOS.1.6-8.B
✓			Reducing fractions: advanced	NOS.1.3-5.E; NOS.1.6-8.B
✓			Converting improper fractions to mixed	NOS.1.3-5.E; NOS.1.6-8.B
✓			Converting mixed fractions to improper	NOS.1.3-5.E; NOS.1.6-8.B

Proportions, etc. topics

✓			Proportions	NOS.1.6-8.D
✓			Proportions—advanced	NOS.1.6-8.D
✓			Simplest form (reduced and mixed)	NOS.1.3-5.E; NOS.1.6-8.B
✓			Comparing fractions	NOS.1.3-5.E; NOS.1.6-8.B
✓			Fraction topics combination	NOS.1.3-5.E; NOS.1.6-8.B

Fractions

Computing with like fractions topics

✓			Fractions: adding likes	NOS.III.3-5.E; NOS.III.6-8.A; NOS.III.6-8.B
✓			Fractions: adding likes—advanced	NOS.III.3-5.E; NOS.III.6-8.A; NOS.III.6-8.B
✓			Fractions: subtracting likes	NOS.III.3-5.E; NOS.III.6-8.A; NOS.III.6-8.B
✓			Fractions: adding and subtracting likes	NOS.III.3-5.E; NOS.III.6-8.A; NOS.III.6-8.B

Computing with fractions topics

✓			Fractions: adding	NOS.III.3-5.E; NOS.III.6-8.A; NOS.III.6-8.B
✓			Fractions: subtracting	NOS.III.3-5.E; NOS.III.6-8.A; NOS.III.6-8.B
✓			Fractions: adding and subtracting	NOS.III.3-5.E; NOS.III.6-8.A; NOS.III.6-8.B
✓			Fractions: multiplying (proper)	NOS.III.6-8.A; NOS.III.6-8.B
✓			Fractions: multiplying	NOS.III.6-8.A; NOS.III.6-8.B
✓			Fractions: dividing	NOS.III.6-8.A; NOS.III.6-8.B
✓			Fractions: multiplying and dividing	NOS.III.6-8.A; NOS.III.6-8.B
✓			Fractions: add / sub / mul / div	NOS.III.3-5.E; NOS.III.6-8.A; NOS.III.6-8.B

Decimals

Naming and rounding decimals topics

✓			Decimals: naming	NOS.1.3-5.A
✓			Decimals: rounding	NOS.III.3-5.D

Decimal computing topics: level 1

✓			Decimals: adding	NOS.III.3-5.E; NOS.III.6-8.A; NOS.III.6-8.B
✓			Decimals: subtracting	NOS.III.3-5.E; NOS.III.6-8.A; NOS.III.6-8.B
✓			Decimals: adding and subtracting	NOS.III.3-5.E; NOS.III.6-8.A; NOS.III.6-8.B
✓			Decimals: multiplying	NOS.III.6-8.A; NOS.III.6-8.B
✓			Decimals: dividing	NOS.III.6-8.A; NOS.III.6-8.B
✓			Decimals: multiplying and dividing	NOS.III.6-8.A; NOS.III.6-8.B
✓			Decimals: add / sub / mul / div	NOS.III.6-8.A; NOS.III.6-8.B

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← **Level 1** = Grades K-3
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			Decimal computing topics: level 2	NCTM Standards
✓	✓	✓	Decimals: advanced—adding	NOS.III.3-5.E; NOS.III.6-8.A; NOS.III.6-8.B
✓	✓	✓	Decimals: advanced—subtracting	NOS.III.3-5.E; NOS.III.6-8.A; NOS.III.6-8.B
✓	✓	✓	Decimals: advanced—add / sub	NOS.III.3-5.E; NOS.III.6-8.A; NOS.III.6-8.B
✓	✓	✓	Decimals: advanced—multiplying	NOS.III.6-8.A; NOS.III.6-8.B
✓	✓	✓	Decimals: advanced—dividing	NOS.III.6-8.A; NOS.III.6-8.B
✓	✓	✓	Decimals: advanced—mul / div	NOS.III.6-8.A; NOS.III.6-8.B
✓	✓	✓	Decimals: advanced—add / sub / mul / div	NOS.III.6-8.A; NOS.III.6-8.B
			Percents	
			Converting topics	
✓	✓	✓	Converting fractions to percents	NOS.I.6-8.A; NOS.I.6-8.B
✓	✓	✓	Converting percents to fractions	NOS.I.6-8.A; NOS.I.6-8.B
✓	✓	✓	Converting fractions to decimals	NOS.I.6-8.A; NOS.I.6-8.B
✓	✓	✓	Converting decimals to fractions	NOS.I.6-8.A; NOS.I.6-8.B
✓	✓	✓	Converting between percents and decimals	NOS.I.6-8.A; NOS.I.6-8.B
✓	✓	✓	Converting percents, decimals and fractions	NOS.I.6-8.A; NOS.I.6-8.B
			Computing with percents topics	
✓	✓	✓	Estimating percents	NOS.I.6-8.A; NOS.I.6-8.B
✓	✓	✓	Finding 50%, 100% and 200% of a number	NOS.I.6-8.A; NOS.I.6-8.B
✓	✓	✓	Finding percents of numbers related to 100	NOS.I.6-8.A; NOS.I.6-8.B
✓	✓	✓	What is N% of B?	NOS.I.6-8.A; NOS.I.6-8.B
✓	✓	✓	A is what percent of B?	NOS.I.6-8.A; NOS.I.6-8.B
✓	✓	✓	A is N% of what number?	NOS.I.6-8.A; NOS.I.6-8.B
✓	✓	✓	Combination of percent computation topics	NOS.I.6-8.A; NOS.I.6-8.B
			Estimation Preparation*	
			Doubling, halving topics	
✓	✓	✓	Doubling: level 1	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓	✓	✓	Doubling: level 2	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓	✓	✓	Halving: level 1	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓	✓	✓	Halving: level 2	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
✓	✓	✓	Multiplying by 2	NOS.III.PreK-2.A; NOS.III.PreK-2.B; NOS.III.3-5.B
			Rounding topics	
✓	✓	✓	Rounding to the nearest 10	NOS.III.PreK-2.A; NOS.III.3-5.C
✓	✓	✓	Rounding to the nearest 100	NOS.III.PreK-2.A; NOS.III.3-5.C
✓	✓	✓	Rounding to the nearest 1000	NOS.III.PreK-2.A; NOS.III.3-5.C
✓	✓	✓	Rounding decimals	NOS.III.3-5.D
			Multiplication brush-up topics	
✓	✓	✓	Squares through 12 x 12	NOS.III.3-5.A; NOS.III.3-5.B
✓	✓	✓	Squares through 20 x 20	NOS.III.3-5.A; NOS.III.3-5.B
✓	✓	✓	Squares through 25 x 25	NOS.III.3-5.A; NOS.III.3-5.B
			Converting and reducing topics	
✓	✓	✓	Converting fractions to decimals	NOS.I.6-8.A; NOS.I.6-8.B
✓	✓	✓	Converting decimals to fractions	NOS.I.6-8.A; NOS.I.6-8.B

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* “Estimation Preparation” and “Math Strategies” topics are designed to help students with estimation.



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Math Strategies*

			Multiplication and div. strategies topics	NCTM Standards
✓	✓		Multiplying by 4	NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Dividing by 4	NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Multiplying by 5	NOS.III.3-5.A; NOS.III.3-5.B
✓	✓		Multiplying by 11	NOS.III.3-5.A; NOS.III.3-5.B
	✓		Multiplying by 21	NOS.III.3-5.A; NOS.III.3-5.B
	✓		Multiplying by 25	NOS.III.3-5.A; NOS.III.3-5.B
	✓		Dividing by 25	NOS.III.3-5.A; NOS.III.3-5.B
			Advanced strategies topics	
	✓		Same 10's digits but 1's digits add to 10	NOS.III.3-5.B
	✓		Same 1's digits but 10's digits add to 10	NOS.III.3-5.B
	✓		Numbers differing by 2: level 1	NOS.III.3-5.B
	✓		Numbers differing by 2: level 2	NOS.III.3-5.B
	✓		Numbers differing by 2, 4, 6	NOS.III.3-5.B
			Estimation	
			Estimating with whole numbers topics	
✓			Addition: level 1	NOS.III.3-5.B
✓			Addition: level 2	NOS.III.3-5.B
✓			Subtraction	NOS.III.3-5.B
✓			Multiplication: level 1	NOS.III.3-5.A; NOS.III.3-5.B
✓			Multiplication: level 2	NOS.III.3-5.A; NOS.III.3-5.B
✓			Division: level 1	NOS.III.3-5.A; NOS.III.3-5.B
✓			Division: level 2	NOS.III.3-5.A; NOS.III.3-5.B
✓			Combination: level 1	NOS.III.3-5.A; NOS.III.3-5.B
✓			Combination: level 2	NOS.III.3-5.A; NOS.III.3-5.B
			Adding multiple numbers topics	
✓	✓		Add multiple numbers: level 1	NOS.III.3-5.B
✓	✓		Add multiple numbers: level 2	NOS.III.3-5.B
			Estimating with fractions topics	
	✓		1/2 of a number	NOS.III.6-8.A; NOS.III.6-8.B
	✓		1/3 of a number	NOS.III.6-8.A; NOS.III.6-8.B
	✓		1/4 of a number	NOS.III.6-8.A; NOS.III.6-8.B
	✓		1/5 of a number	NOS.III.6-8.A; NOS.III.6-8.B
	✓		Combination: level 1	NOS.III.6-8.A; NOS.III.6-8.B
	✓		Combination: level 2	NOS.III.6-8.A; NOS.III.6-8.B
	✓		Numerators greater than 1	NOS.III.6-8.A; NOS.III.6-8.B
			Estimating with decimals topics	
	✓	✓	Finding a decimal: level 1	NOS.III.6-8.A; NOS.III.6-8.B
	✓	✓	Finding a decimal: level 2	NOS.III.6-8.A; NOS.III.6-8.B
	✓	✓	Finding a decimal: level 3	NOS.III.6-8.A; NOS.III.6-8.B
			Estimating with percents topics	
	✓		50% of a number	NOS.I.6-8.A; NOS.I.6-8.B
	✓		33% of a number	NOS.I.6-8.A; NOS.I.6-8.B
	✓		25% of a number	NOS.I.6-8.A; NOS.I.6-8.B
	✓		20% of a number	NOS.I.6-8.A; NOS.I.6-8.B
	✓		Estimating a percent: combo level 1	NOS.I.6-8.A; NOS.I.6-8.B
	✓		Estimating a percent: combo level 2	NOS.I.6-8.A; NOS.I.6-8.B

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Estimation (continued)

Special percent topics

Level 1	Level 2	Level 3		NCTM Standards
✓	✓	✓	Changing a number by a percent: level 1	NOS.I.6-8.A; NOS.I.6-8.B
✓	✓	✓	Changing a number by a percent: level 2	NOS.I.6-8.A; NOS.I.6-8.B
✓	✓	✓	Changing a number by a percent: level 3	NOS.I.6-8.A; NOS.I.6-8.B
✓	✓	✓	Estimating the percent increase	NOS.I.6-8.A; NOS.I.6-8.B

Estimating with money topics

Level 1	Level 2	Level 3		NCTM Standards
✓	✓	✓	Round to nearest dollar	NOS.III.3-5.D
✓	✓	✓	Estimate total cost: level 1	NOS.III.3-5.D
✓	✓	✓	Estimate total cost: level 2	NOS.III.3-5.D
✓	✓	✓	Estimating savings at sales	NOS.III.3-5.D

Integers

Integer introduction topics

Level 1	Level 2	Level 3		NCTM Standards
✓	✓	✓	Integers: comparing sizes	NOS.I.3-5.F; NOS.I.6-8.G
✓	✓	✓	Integers: signs only—add / sub	NOS.III.6-8.B; NOS.III.9-12.A
✓	✓	✓	Integers: signs only—mul / div	NOS.III.6-8.B; NOS.III.9-12.A
✓	✓	✓	Integers: signs only—add / sub / mul / div	NOS.III.6-8.B; NOS.III.9-12.A

Integer computing topics: level 1

Level 1	Level 2	Level 3		NCTM Standards
✓	✓	✓	Integers: adding	NOS.III.6-8.B; NOS.III.9-12.A
✓	✓	✓	Integers: subtracting	NOS.III.6-8.B; NOS.III.9-12.A
✓	✓	✓	Integers: adding and subtracting	NOS.III.6-8.B; NOS.III.9-12.A
✓	✓	✓	Integers: multiplying	NOS.III.6-8.B; NOS.III.9-12.A
✓	✓	✓	Integers: dividing	NOS.III.6-8.B; NOS.III.9-12.A
✓	✓	✓	Integers: multiplying and dividing	NOS.III.6-8.B; NOS.III.9-12.A
✓	✓	✓	Integers: add / sub / mul / div	NOS.III.6-8.B; NOS.III.9-12.A

Integer computing topics: level 2

Level 1	Level 2	Level 3		NCTM Standards
✓	✓	✓	Integers: intermediate adding	NOS.III.6-8.B; NOS.III.9-12.A
✓	✓	✓	Integers: intermediate subtracting	NOS.III.6-8.B; NOS.III.9-12.A
✓	✓	✓	Integers: intermediate add / sub	NOS.III.6-8.B; NOS.III.9-12.A
✓	✓	✓	Integers: intermediate multiplying	NOS.III.6-8.B; NOS.III.9-12.A
✓	✓	✓	Integers: intermediate dividing	NOS.III.6-8.B; NOS.III.9-12.A
✓	✓	✓	Integers: intermediate mul / div	NOS.III.6-8.B; NOS.III.9-12.A
✓	✓	✓	Integers: intermediate—add / sub / mul / div	NOS.III.6-8.B; NOS.III.9-12.A

Integer computing topics: level 3

Level 1	Level 2	Level 3		NCTM Standards
✓	✓	✓	Integers: advanced add / sub	NOS.III.6-8.B; NOS.III.9-12.A
✓	✓	✓	Integers: advanced mul / div	NOS.III.6-8.B; NOS.III.9-12.A
✓	✓	✓	Integers: mixed operations (-2 + 3 x -4)	NOS.III.6-8.B; NOS.III.9-12.A

Equations

Equations introduction topics

Level 1	Level 2	Level 3		NCTM Standards
✓	✓	✓	Evaluating number phrases	ALG.II.3-5.C
✓	✓	✓	Evaluating with integers	ALG.II.6-8.C; ALG.II.9-12.C
✓	✓	✓	Simplifying number phrases	ALG.II.6-8.C; ALG.II.9-12.C

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Level 1	Level 2	Level 3
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Equations (continued)

Equations with whole numbers topics			NCTM Standards
		✓	Equations: whole numbers—add <i>ALG.II.6-8.D; ALG.II.9-12.B</i>
		✓	Equations: whole numbers—sub <i>ALG.II.6-8.D; ALG.II.9-12.B</i>
		✓	Equations: whole numbers—add / sub <i>ALG.II.6-8.D; ALG.II.9-12.B</i>
		✓	Equations: whole numbers—mul <i>ALG.II.6-8.D; ALG.II.9-12.B</i>
		✓	Equations: whole numbers—div <i>ALG.II.6-8.D; ALG.II.9-12.B</i>
		✓	Equations: whole numbers—mul/div <i>ALG.II.6-8.D; ALG.II.9-12.B</i>
		✓	Equations: whole numbers—add / sub / mul / div <i>ALG.II.6-8.D; ALG.II.9-12.B</i>
		✓	Equations: whole numbers—two operations <i>ALG.II.6-8.D; ALG.II.9-12.B</i>
Equations with integers topics			
		✓	Equations: integers—add <i>ALG.II.6-8.D; ALG.II.9-12.B</i>
		✓	Equations: integers—sub <i>ALG.II.6-8.D; ALG.II.9-12.B</i>
		✓	Equations: integers—add / sub <i>ALG.II.6-8.D; ALG.II.9-12.B</i>
		✓	Equations: integers—multiplying <i>ALG.II.6-8.D; ALG.II.9-12.B</i>
		✓	Equations: integers—dividing <i>ALG.II.6-8.D; ALG.II.9-12.B</i>
		✓	Equations: integers—mul / div <i>ALG.II.6-8.D; ALG.II.9-12.B</i>
		✓	Equations: integers—add / sub / mul / div <i>ALG.II.6-8.D; ALG.II.9-12.B</i>
		✓	Equations: integers—two operations <i>ALG.II.6-8.D; ALG.II.9-12.B</i>
		✓	Equations: fractional coefficients <i>ALG.II.6-8.D; ALG.II.9-12.B</i>