

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: Level 1
The Quarter Mile Math: Level 2
The Quarter Mile Math: Level 3
The Quarter Mile Math: Levels 1 and 2 Bundle
The Quarter Mile Math: Levels 2 and 3 Bundle
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 |



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

| | | | 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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The Quarter Mile Math: Level 1
The Quarter Mile Math: Level 2
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The Quarter Mile Math: Cross-Section of Topics

Product List

Level 1
Level 2
Level 3



Level 1 = Grades K-3
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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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Level 1 = Grades K-3

Level 2 = Grades 4-6

Level 3 = Grades 6-9

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

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

| | | | 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.



← **Level 1** = Grades K-3
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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 Preparation" and "Math Strategies" topics are designed to help students with estimation.



Level 1 = Grades K-3
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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 |
|---------|---------|---------|



Level 1 = Grades K-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> |