

Math ISAT: Estimation and Accurate Computations

Skills: Whole Numbers – Multiplication and Division

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| Students: | RIT Above 270: <ul style="list-style-type: none">• <i>No Skills Listed</i> |
| Students: | RIT 261-270: <ul style="list-style-type: none">• <i>No Skills Listed</i> |
| Students: | RIT 251-260: <ul style="list-style-type: none">• <i>No Skills Listed</i> |
| Students: | RIT 241-250: <ul style="list-style-type: none">• <i>No Skills Listed</i> |
| Students: | RIT 231-240: <ul style="list-style-type: none">• Divides multiple-digit numbers• Predicts the relative size of the answer when dividing a smaller whole number by a larger whole number• Models algorithms using place value concepts (multiplication and division with whole numbers)• Uses appropriate algorithms to represent multiplication or division with whole numbers |
| Students: | RIT 221-230: <ul style="list-style-type: none">• Multiplies multiple-digit numbers• Divides a 4-digit number by a 2-digit number• Divides multiple-digit numbers• Uses division for multiple-step problems• Divides numbers by powers of 10• Uses multiplication strategies to develop computational fluency (e.g., doubles, 9-patterns, decomposing, partial products)• Uses number sense strategies to judge the reasonableness of given answers (multiplication/division only)• Solves complex word problems involving whole number division with remainder (e.g., 2-step, 2-digit divisor)• Solves real-world multiple-step problems involving whole numbers• Predicts the relative size of the answer when dividing whole numbers• Models algorithms using place value concepts (multiplication and division with whole numbers) |
| Students: | RIT 211-220: <ul style="list-style-type: none">• Instantly recalls basic multiplication and division facts in a table• Multiplies a 2-digit number by a 2-digit number with regrouping• Multiplies a 3-digit number by a 2-digit number with regrouping• Multiplies a 3-digit number by a 3-digit number• Multiplies multiple-digit numbers• Multiplies a 4- or more digit number by multiples of 100 or 1000• Divides a 2-digit number or a 3-digit number by a 1- digit number, with a remainder• Divides a 4-digit number by a 1-digit number, with no remainder• Divides a 4-digit number by a 1-digit number, with a remainder• Divides a 3-digit number by a 2-digit number• Divides a 4-digit number by a 2-digit number• Divides a whole number by a whole number and expresses the remainder as a decimal• Divides multiple-digit numbers• Evaluates a numerical equation involving more than one operation• Uses strategies to determine 2 or more missing digits (multiplication/division only)• Solves problems using the inverse relationship between multiplication and division• Uses number sense strategies to solve problems (multiplication/division)• Evaluates number sense strategies used to solve problems• Performs mental computation with multiplication• Performs mental computation with division• Solves whole number word problems with division over 10×10• Solves complex word problems involving whole number division with remainder (e.g., 2-step, 2-digit divisor)• Solves real-world problems involving 2-step multiple operations, whole numbers only• Solves real-world multiple-step problems involving whole numbers• Predicts the relative size of the answer when multiplying whole numbers• Predicts the relative size of the answer when computing with 10's, 100's, 1000's |

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Skills: Whole Numbers – Multiplication and Division

Students:

RIT 201-210:

- Instantly recalls basic multiplication facts where one factor is 6-12 and the other factor is 0-12
- Instantly recalls basic multiplication and division facts in a table
- Multiplies a 2-digit number by a 1-digit number with regrouping
- Multiplies a 3- or 4-digit number by a 1-digit number
- Multiplies multiple 1-digit numbers
- Multiplies a 2-digit number by a 2-digit number with no regrouping
- Multiplies a 2-digit number by a 2-digit number with regrouping
- Multiplies a 3-digit number by a 2-digit number with regrouping
- Multiplies a 3-digit number by a 3-digit number
- Multiplies a 2- or 3-digit number by multiples of 10 or 100
- Instantly recalls division facts with dividend and divisors less than 13
- Divides a 1-digit number by a 1-digit number, with a remainder
- Divides a 2-digit number by a 1-digit number, with no remainder
- Divides a 2-digit number or a 3-digit number by a 1-digit number, with a remainder
- Divides a 3-digit number by a 1-digit number, with no remainder
- Divides a 4-digit number by a 1-digit number, with no remainder
- Divides a 4-digit number by a 1-digit number, with a remainder
- Divides a 2-digit number by a 2-digit number, with a remainder
- Divides a 3-digit number by a multiple of 10
- Divides a 4-digit number by a 2-digit number
- Evaluates a numerical equation involving more than one operation
- Performs mental computation with multiplication
- Performs mental computation with division
- Solves word problems involving whole number multiplication with numbers greater than 10×10
- Solves word problems with whole number division facts with dividend and divisors less than 11
- Solves whole number word problems with division over 10×10
- Solves simple word problems involving whole number division with remainder (e.g., 1-step, 1-digit divisor)
- Solves real-world problems involving 2-step multiple operations, whole numbers only

Students:

RIT 191-200:

- Instantly recalls basic multiplication facts where one factor is 6-12 and the other factor is 0-12
- Multiplies a 2- or 3-digit number by a 1-digit number with no regrouping
- Multiplies a 2-digit number by a 1-digit number with regrouping
- Multiplies a 3- or 4-digit number by a 1-digit number
- Multiplies a 2-digit number by a 2-digit number with no regrouping
- Multiplies a 3-digit number by a 2-digit number with no regrouping
- Instantly recalls division facts with dividend and divisors less than 10
- Instantly recalls division facts with dividend and divisors less than 13
- Divides a 2-digit number by a 1-digit number, with no remainder
- Uses strategies to determine 1 missing digit (multiplication/division only)
- Uses repeated subtraction for division
- Performs mental computation with multiplication
- Solves word problems involving basic whole number multiplication facts to 10×10
- Solves word problems involving whole number multiplication with numbers greater than 10×10
- Solves word problems with whole number division facts with dividend and divisors less than 11
- Solves simple word problems involving whole number

Students:

RIT 181-190:

- Multiplies basic facts to 10×10 vertically
- Multiplies a 2-digit number by a 1-digit number with regrouping
- Instantly recalls division facts with dividend and divisors less than 10
- Uses sharing for division
- Solves word problems involving basic whole number multiplication facts to 10×10
- Solves word problems with whole number division facts with dividend and divisors less than 11, involving money

Students:

RIT 171-180:

- Instantly recalls basic multiplication facts where one factor is 0-5 and the other factor is 0-12
- Multiplies basic facts to 10×10 vertically

Students:

RIT 161-170:

- Instantly recalls basic multiplication facts where one factor is 0-5 and the other factor is 0-12

Students:

RIT Below 161:

- *No Skills Listed*