ISEE Middle Level Math Prep 2020

A Comprehensive Review and Step-By-Step Guide to Preparing for the ISEE Middle Level Math Test

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By

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Description

ISEE Middle Level Math Prep 2020, which reflects the 2020 ISEE Middle Level test guidelines, provides students with the confidence and math skills they need to ace the ISEE Middle Level Math test. This comprehensive Prep book with hundreds of examples, over 2,500 sample questions, and two full length ISEE Middle Level Math tests is all you will ever need to fully prepare for the ISEE Middle Level Math. It will help you hone your math skills, overcome your exam anxiety, and boost your confidence -- and do your best to succeed on the ISEE Middle Level Math Test.

Whether you are intimidated by math, or even if you were the first to raise your hand in the Math classes, this book can help you incorporate the most effective method and the right strategies to prepare for the ISEE Middle Level Math test successfully. ***ISEE Middle Level Math Prep 2020*** is a breakthrough in Math learning — offering a winning formula and the most powerful methods for learning basic Math topics confidently.

The surest way to succeed on ISEE Middle Level Math Test is with intensive practice in every math topic tested--and that's what you will get in ***ISEE Middle Level Math Prep 2020***. Each chapter of this focused format has a comprehensive review created by Test Prep experts that goes into detail to cover all of the content likely to appear on the ISEE Middle Level Math test. Not only does this all-inclusive workbook offer everything you will ever need to conquer ISEE Middle Level Math test, it also contains two full-length and realistic STAAR 7 Math tests that reflect the format and question types on the ISEE Middle Level to help you check your exam-readiness and identify where you need more practice.

Inside the pages of this comprehensive prep book, students can learn math topics in a structured manner with a complete study program to help them understand essential math skills. It also has many exciting features, including:

- Content 100% aligned with the 2020 ISEE Middle Level test
- Written by ISEE Middle Level Math tutors and test experts
- Complete coverage of all ISEE Middle Level Math concepts and topics which you will be tested
- Step-by-step guide for all ISEE Middle Level Math topics
- Over 2,500 additional ISEE Middle Level math practice questions in both multiple-choice and grid-in formats with answers grouped by topic, so you can focus on your weak areas
- Abundant Math skill building exercises to help test-takers approach different question types that might be unfamiliar to them
- 2 full-length practice tests (featuring new question types) with detailed answers

ISEE Middle Level Math Prep 2020 is the only book you'll ever need to master Basic Math topics! It can be used as a self–study course – you do not need to work with a Math tutor. (It can also be used with a Math tutor)

Ideal for self-study as well as for classroom usage.

Answers – Chapter 3

Factoring Numbers

1) 2×2
2) 2×3
3) 3×3
4) $2 \times 2 \times 3$
5) $2 \times 2 \times 2 \times 2$
6) $2 \times 3 \times 3$
7) $2 \times 2 \times 2 \times 3$
8) $2 \times 2 \times 7$
9) $2 \times 2 \times 3 \times 3$
10) 2×19
11) $2 \times 3 \times 7$
12) $2 \times 2 \times 2 \times 7$

Greatest Common Factor

1) 2
2) 4
3) 5
4) 4
5) 2
6) 6
7) 3
8) 2
9) 3
10) 2
11) 2
12) 2

Least Common Multiple

1) 4
2) 6
3) 24
4) 84
5) 16
6) 24
7) 12
8) 20
9) 66
10) 28
11) 144
12) 96

Chapter 4: Integers and Order of Operations

Math Topics that you'll learn Chapter:

- ✓ Adding and Subtracting Integers
- ✓ Multiplying and Dividing Integers
- ✓ Ordering Integers and Numbers
- ✓ Order of Operations
- ✓ Integers and Absolute Value

Without mathematics, there's nothing you can do. Everything around you is mathematics. Everything around you is numbers." ~ Shakuntala Devi

Adding and Subtracting Integers

Step-by-step guide:

- ✓ Integers includes: zero, counting numbers, and the negative of the counting numbers. $\{\ldots, -3, -2, -1, 0, 1, 2, 3, \ldots\}$
- ✓ Add a positive integer by moving to the right on the number line.
- ✓ Add a negative integer by moving to the left on the number line.
- ✓ Subtract an integer by adding its opposite.

Examples:

1) Solve. $(-2) - (-6) =$

Keep the first number, and convert the sign of the second number to it's opposite. (change subtraction into addition. Then: $(-2) + 6 = 4$

2) Solve. $8 + (12 - 20) =$

First subtract the numbers in brackets, $12 - 20 = -8$

Then: $8 + (-8) =$ → change addition into subtraction: $8 - 8 = 0$

Find each sum or difference.

1) $-(2) + 9 =$

2) $(-4) + (-8) =$

3) $12 + (-18) =$

4) $13 + (-22) =$

5) $2 + (-9) + 3 =$

6) $(-18) + (-4) + 2 =$

7) $4 + (-2) - (-8) =$

8) $5 - (-20 - 12) =$

9) $(-4 + 2) - 6 =$

10) $10 - (-6 + 5) =$

11) $15 - (5 - 3) =$

12) $-(22) - (-13) + 4 =$

Multiplying and Dividing Integers

Step-by-step guide:

Use these rules for multiplying and dividing integers:

- ✓ (negative) × (negative) = positive
- ✓ (negative) ÷ (negative) = positive
- ✓ (negative) × (positive) = negative
- ✓ (negative) ÷ (positive) = negative
- ✓ (positive) × (positive) = positive

Examples:

1) Solve. $3 \times (12 - 14) =$

First subtract the numbers in brackets, $12 - 14 = -2 \rightarrow (3) \times (-2) =$

Now use this formula: (negative) × (positive) = negative
$(3) \times (-2) = -6$

2) Solve. $(-8) + (12 \div 4) =$

First divided 48 by 6 , the numbers in brackets, $12 \div 4 = 3$

$= (-8) + (3) = -8 + 3 = -5$

Find each product or quotient.

1) $(-2) \times (9) =$

2) $(-12) \times 3 =$

3) $(-5) \times (-8) =$

4) $(-3) \times (-10) =$

5) $(-4) \times (-3) \times 2 =$

6) $(18 - 3) \times (-5) =$

7) $(16 - 4) \div (-4) =$

8) $(-15) \div (-3) =$

9) $(-48) \div (-6) =$

10) $56 \div (-8) =$

11) $(-121) \div 11 =$

12) $(-128) \div (-4) =$

Ordering Integers and Numbers

Step-by-step guide:

- ✓ When using a number line, numbers increase as you move to the right.
- ✓ When comparing two numbers, think about their position on number line. If one number is on the right side of another number, it is a bigger number. For example, -3 is bigger than -5 because it is on the right side of -5 on number line.

Examples:

1) Order this set of integers from least to greatest. $-4, -1, -5, 4, 2, 7$
   The smallest number is -5 and the largest number is 7.

   Now compare the integers and order them from least to greatest:
   $-5 < -4 < -1 < 2 < 4 < 7$

2) Order each set of integers from greatest to least. $3, -2, -1, 6, -9, 8$
   The largest number is 8 and the smallest number is -9.

   Now compare the integers and order them from greatest to least:
   $8 > 6 > 3 > -1 > -2 > -9$

Order each set of integers from least to greatest.

1) $6, -8, -5, 0, 2$ ___, ___, ___, ___, ___, ___
2) $-3, -10, 4, 11, 8$ ___, ___, ___, ___, ___, ___
3) $17, -11, -18, 20, -19$ ___, ___, ___, ___, ___, ___
4) $-14, -24, 17, -6, 31$ ___, ___, ___, ___, ___, ___

Order each set of integers from greatest to least.

5) $10, 15, -8, -11, -5$ ___, ___, ___, ___, ___, ___
6) $22, 30, -13, -19, 38$ ___, ___, ___, ___, ___, ___
7) $44, -20, -17, 54, -4$ ___, ___, ___, ___, ___, ___
8) $67, 80, -13, -9, 93$ ___, ___, ___, ___, ___, ___

Order of Operations

Step-by-step guide:

When there is more than one math operation, use PEMDAS:

- ✓ Parentheses
- ✓ Exponents
- ✓ Multiplication and Division (from left to right)
- ✓ Addition and Subtraction (from left to right)

Examples:

1) Solve. $(2+4) \div (2^2 \div 4) =$

First simplify inside parentheses: $(6) \div (4 \div 4) = (6) \div (1) =$
Then: $(6) \div (1) = 6$

2) Solve. $(9 \times 6) - (10 - 6) =$

First simplify inside parentheses: $(9 \times 6) - (10 - 6) = (54) - (4) =$

Then: $(54) - (4) = 50$

Evaluate each expression.

1) $12 + (3 \times 2) =$
2) $8 - (4 \times 5) =$
3) $(8 \times 2) + 14 =$
4) $(10 - 6) - (4 \times 3) =$
5) $15 + (12 \div 2) =$
6) $(24 \times 3) \div 4 =$
7) $(28 \div 2) \times (-4) =$
8) $(2 \times 6) + (14 - 8) =$
9) $45 + (4 \times 2) + 12 =$
10) $(10 \times 5) \div (4 + 1) =$
11) $(-6) + (8 \times 6) + 10 =$
12) $(12 \times 4) - (56 \div 4) =$