Big Ideas Math

6th Grade
7th Grade
8th Grade

Resources: Blue: Common Core

- Student Dynamic eBook
- Apps
- Basic Skills Handbook
- Game Closet
- Graphic Organizer: MS Word
- Graphic Organizer: PDF
- Math Tool Paper
- Multi-Language Glossary
- Skills Review Handbook
- Real-Life STEM Videos
- Vocabulary Flash Cards
- Download eBooks
Example 1

a. Solve \( d - \frac{1}{4} = -\frac{1}{2} \)

\[
\begin{align*}
\frac{d}{4} &= -\frac{1}{2} \\
\frac{1}{4} + \frac{1}{4} &= -\frac{1}{2} + \frac{1}{4} \\
\frac{2}{4} &= \frac{-1}{4} \\
d &= \frac{-1}{4}
\end{align*}
\]

b. Solve \( m + 4.8 = 9.2 \)

\[
\begin{align*}
m + 4.8 &= 9.2 \\
-4.8 &= -4.8 \\
m &= 4.4
\end{align*}
\]

Example 4

The melting point of ice is \( \frac{2}{9} \) of the melting point of candle wax. The melting point of ice is 32°F. Write and solve an equation to find the melting point of candle wax.

\[
\begin{align*}
32 &= \frac{2}{9} \cdot x \\
\frac{32}{\frac{2}{9}} &= \frac{2}{9} \cdot \frac{2}{9} \cdot x \\
144 &= x
\end{align*}
\]

The melting point of candle wax is 144°F.
# Basic Skills Handbook

## Topic 1: Whole Numbers

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## Topic 2: Factors and Adding Integers

### Key Concept and Vocabulary

- Use integer counters to add: 3 + (-5) = 2
- Plus equals:

### Practice Makes Purr-fect™

Check your answers at BigIdeasMath.com.

Draw the integer counters. Write the integers in [ ].

1. 
   - Integer counters: 
   - Integers: [ ]
   - Calculation: \[4 + (-2) = 2\]

2. 
   - Integer counters: 
   - Integers: [ ]
   - Calculation: \[-4 + 2 = -2\]
Math Tool Paper

Middle School Tool Paper

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Name ___________________________________________ Date ______________

4-Step Plan

Problem Solving Strategies

- Make a Model
- Draw a Diagram
- Use a Venn Diagram
- Act It Out/Use Manipulatives
- Guess, Check, and Revise
- Break into Parts
- Solve a Simpler Problem
- Look for a Pattern
- Work Backward
- Make an Organized List or Table
- Write a Number Sentence
- Use Logical Reasoning

EXPLORE

1. What do you know?
2. What do the terms mean?
3. What do you need to find?

PLAN

1. Choose a strategy.
2. How do the facts relate to each other?
3. Estimate the answer.
BIG IDEAS MATH

Skills Review Handbook (Middle School)

Topic 1: Whole Numbers

1.1 Rounding Whole Numbers
1.2 Adding and Subtracting Whole Numbers
1.3 Multiplying Whole Numbers
1.4 Dividing Whole Numbers
1.5 Writing Whole Number Expressions

REVIEW: Dividing Whole Numbers

Key Concept and Vocabulary

Visual Model

Skill Examples

1. 42 ÷ 6 = 7
2. \( \frac{65}{13} = 65 \div 13 = 5 \)
3. \( \frac{13}{15} \)

Application Example

4. Six people find a treasure worth $12,300. If each person receives an equal share, how much does each person get?

\[ \frac{12,300}{6} = \frac{2050}{2} \]

Each person gets $2050.

PRACTICE MAKES PURR-FECT™

Find the quotient.

5. 56 ÷ 8 = ______
6. 99 ÷ 11 = ______
7. 132 ÷ 6 = ______
8. 80 ÷ 5 = ______

Check your answers at BigIdeasMath.com.