lesson ten - student resource sheet

Lesson Objective: Subtract positive integers from positive and negative integers.

Vocabulary Box

additive identity — The number zero, because the sum of zero and any number is that number. Example: 6 + 0 = 6.

Independent Practice

Directions: Complete the following practice problems on your own. Your teacher will review the answers. Make sure you show all your work.

I. Circle the correct solution to the subtraction problems.

1. –8 – 12 =_____ a. –4 b. –20 c. 4 d. 20
2. 27 – 35 =_____ a. –62 b. –12 c. –8 d. 62
3. –100 – 10 =_____ a. –110 b. –90 c. 90 d. 110

II. Solve each problem.

1. –5 – 42 =_____
2. 63 – 12 =_____
3. 2 – 9 =_____
4. –795 – 578 =_____
5. 5,642 – 8,431 =_____
6. –3 – 3,333 =_____

BONUS?

1. In the space below, draw counters to explain how to subtract 4 – 11.

2. In the space below, draw a number line to explain how to subtract 5 – 13.

Problem Solving

The following chart shows yesterday's checking account balance for six customers of the Math City Bank. Today is the first of the month, so it is time for the bank to withdraw the $5 service fee from each customer's account. Answer the questions about each customer's new balance. Notice that it is possible to have a negative balance.

Customer	A. Alvarez	B. Brown	C. Carter	D. Duncan	E. Epp	F. Fong
Previous Balance	$200	–$30	$3	$0	–$10	$2

1. What is the new balance for A. Alvarez?

2. What is the new balance for B. Brown?

3. What is the new balance for C. Carter?

4. What is the new balance for D. Duncan?

5. What is the new balance for E. Epp?

6. What is the new balance for F. Fong?

7. Which customer has the lowest balance after the $5 service fee is withdrawn?

8. What do you think it means if a customer has a negative balance?

1. What is the solution to –9 – 10?
2. 7 – 12 =_____
3. –4 – 17 =_____

lesson eleven - student resource sheet

Lesson Objective: Subtract negative integers from positive and negative integers.

Vocabulary Box

absolute value — The distance of a number from zero; the positive value of a number. Examples: The absolute value of –5 is 5; the absolute value of 19 is 19.

Guided Practice

Directions: Complete the following practice problems with your partner. Your teacher will review the answers. Make sure you show all your work.

I. Use the integer mat and two-color counters to solve each problem.

1. 3 – 4 =_____
2. 5 – (–6) =_____
3. –4 – (–7) =_____

Negative	Positive

II. Solve each subtraction problem using absolute value.

1. –7 – (–8) =_____

2. 22 – (–12) =_____

3. –25 – (–14) =_____

4. –9 – (–4) =_____

III. Solve each subtraction problem using absolute value. Please work independently.

1. 34 – (–45) =_____

2. –130 – (–56) =_____

3. 76 – (–76) =_____

4. –33 – (–33) = _____

Summary/Closure

A. Vocabulary Words
For the vocabulary term listed, write a sentence relating it to today's lesson.

absolute value —

B. Summarize What We Learned Today
Write a sample problem subtracting a negative integer from a positive or negative integer, and then solve it. Explain how you solved the problem.

lesson twelve - student resource sheet

Lesson Objective: Subtract negative integers from positive and negative integers.

Vocabulary Box

absolute value — The distance of a number from zero; the positive value of a number. Examples: The absolute value of –5 is 5; the absolute value of 19 is 19.

Independent Practice

Directions: Complete the following practice problems on your own. Your teacher will review the answers. Make sure you show all your work.

I. Match the problem with the correct answer.

1. – 8 – (–14) =_____ a. –6
2. –9 – (–3) =_____ b. 22
3. 8 – (–14) =_____ c. 12
4. 9 – (–3) =_____ d. 6

II. Solve each problem.

1. –99 – (–8) =_____
2. –17 – (–9) =_____
3. –38 – (–40) =_____
4. –87 – (–97) =_____
5. –129 – (–77) =_____
6. –81 – (–10) =_____

BONUS

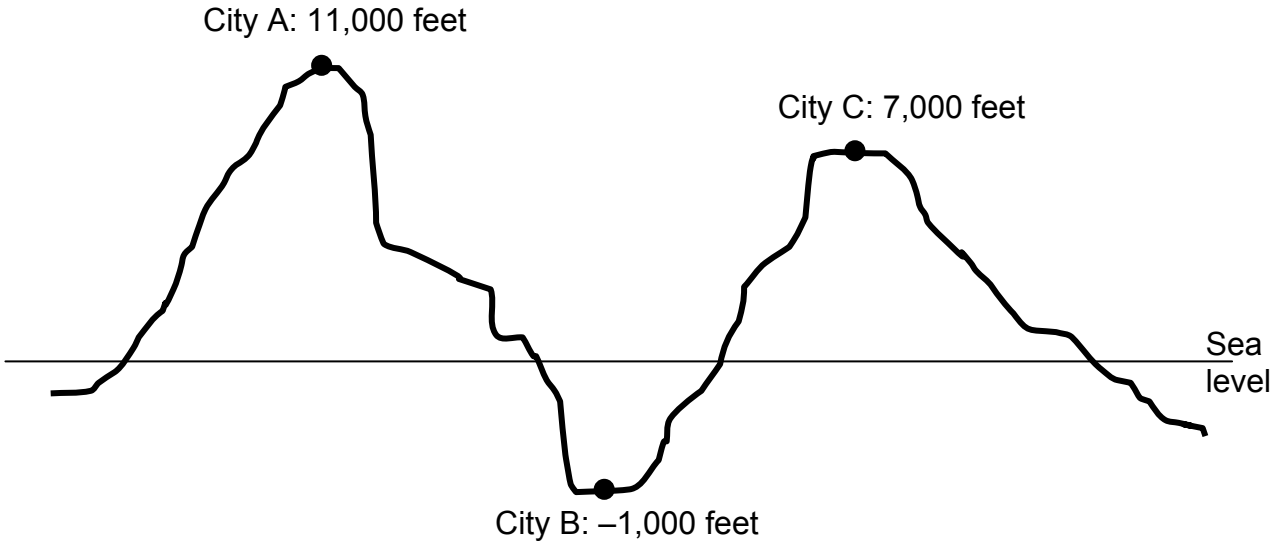
Find the missing integer in each problem. Each missing integer is negative.

1. –15 – _____= –6
2. 45 – _____ = 55
3. –270 – _____ = –267
4. 168 – _____ = 270

Problem Solving

For each question below, write a problem in which you subtract a negative integer from either a positive or negative integer. Make sure you show all your work and write your final answers in complete sentences.

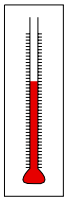
I. Elevation is a measure of how far a certain location is above or below sea level. Sea level has an elevation of 0 feet.



1. What is the difference in elevation between City A and City B? That is, if you were to travel from City A to City B, what would be your total change in elevation?

2. What is the difference in elevation between City C and City B?

II. The temperature on a Celsius thermometer is 0 when water freezes and 100 when water boils.



1. Average low temperatures in parts of Hawaii are around 19 degrees Celsius. Average low temperatures in parts of Alaska are around –25 degrees Celsius. What is the difference in the average low temperatures of these two locations?

2. If you fill an ice cube tray with room temperature water, 20 degrees Celsius, and two hours later the ice cubes are at –20 degrees Celsius, what is the change in temperature?

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1. What is the absolute value of –77?
2. 52 – (–60) =_____
3. –18 – (–6) =_____