

MODULE
1

Adding and Subtracting Integers

Module Quiz: B

- Georgina works on the 30th floor of an office building. She took the elevator to the cafeteria on the 7th floor. How many floors did she travel?

A 7	C 30
B 23	D 37
- Which of the following expressions has the greatest value?

A $-3 + -4 - (-2)$	C $-3 + -4 - 2$
B $-3 - (-4) - (-2)$	D $-3 - (-4) - 2$
- Which of the following is modeled with the number line below?

← -5 -4 -3 -2 -1 0 1 2 3 4 5 →

A $1 + (-4)$	C $1 - (-5)$
B $1 + (-5)$	D $1 - (-4)$
- Danielle is playing a game. She started with 10 points. In the first round she lost 20 points. In the second round she won 45 points. Which of the following shows the changes in Danielle's score?

A $10 - 20 + 45$	C $-10 - 20 + 45$
B $10 - 20 - 45$	D $-10 - 20 - 45$
- Which of the following has the same value as $-10 + -3$?

A $-10 - 3$	C $-3 + 10$
B $-10 - (-3)$	D $-3 - (-10)$
- Which of the following is the additive inverse of -3 ?

A $-\frac{1}{3}$	C $\frac{1}{3}$
B 0	D 3
- What number can be added to -4 to get a sum of 0?

A -4	C $\frac{1}{4}$
B 0	D 4
- Mike deposited \$200 into his bank account. He then wrote checks for \$20 and \$30. Then he deposited \$40 dollars more. Which of the following represents the changes in the value of Mike's account?

A $200 - 20 - 30 + 40$
B $200 - 20 + 30 + 40$
C $200 + 20 - 30 - 40$
D $200 + 20 - 30 + 40$
- A submarine's elevation is -14 feet relative to sea level. A shark is swimming at an elevation of -56 feet. What is the difference in elevation between the submarine and the shark?

A 42 ft	C 60 ft
B 56 ft	D 70 ft
- The temperature in Montreal was -8°C . In New York the temperature was 11°C . How many degrees warmer was the temperature in New York?

A 3	C 11
B 8	D 19
- What is the value of $-2 + 100 - (-50)$?

A 48	C 150
B 148	D 152
- Danny scored 10 points in the first round of a game. He then lost 20 points in the second round. In the final round he earned 40 points. What was Danny's score at the end of the game?

A 10	C 30
B 20	D 40

MODULE
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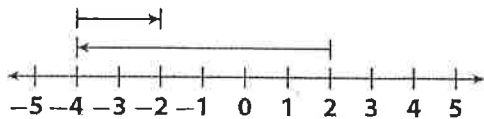
Adding and Subtracting Integers

13. Sean, Christian, Anthony, and Mike went to brunch together. Sean paid \$30, Christian paid \$10, and Anthony paid \$20. If the total bill was \$75, how much did Mike pay?

14. Jenya deposited \$400 into her bank account. A couple of days later she withdrew \$50. The next day she deposited \$20 more. A day later she withdrew \$150.

Write an expression that represents the change in Jenya's account balance.

15. Write an addition or subtraction problem that is modeled by the number line below.



16. Tyrell went to the park to go jogging. The beginning of the running path has an elevation of -2 feet. The highest elevation on the jogging path is 14 feet. What is the difference in elevation between the highest point and the beginning of the path?

17. The value of $x + y$ is negative, and x is a positive integer. What must be true about y ? Explain.

18. What is the value of $-3 - (-10) - 8$?

19. **Temperature in Four Cities**

City	Temperature on Day 1 ($^{\circ}\text{C}$)	Temperature on Day 2 ($^{\circ}\text{C}$)
A	-5°	-1°
B	-12°	-8°
C	-11°	-2°
D	-3°	5°

A meteorologist recorded the temperature in four cities on two days last year, as shown in the table above. Which city had the greatest increase in temperature between the two days?

20. The value of $x - y$ is negative, and x and y are both positive. What can you conclude about the values of x and y ?

21. Luisa claims that when she subtracts two negative integers, the result is always positive. Is she correct? Explain.

22. $-2, -1, -1, 0, -1, 1, -2, \dots$

Find the next 3 numbers in the sequence above. Describe the pattern.

MODULE
2**Multiplying and Dividing Integers****Module Quiz: B**

- A shopper uses a department-store gift card to pay for 3 sweaters priced at \$27 each. What is the change in the value of the gift card?
A -\$81
B -\$27
C -\$24
D \$81
- When her elevator was out of service, Debi walked down 21 flights of stairs. She stopped to rest after every 3 flights. How many times did Debi stop to rest?
A -63
B -31
C 18
D 7
- Last week, Clay wrote 4 checks for \$20 each from his checking account, withdrew another \$30, and finally made a deposit of \$96. What was the change in the balance of his account over the week?
A -\$46
B -\$14
C \$14
D \$46
- Which expression would be evaluated as a positive number?
A $\frac{(-3)(-4)}{(-6)}$
B $\frac{(3)(-4)}{(6)}$
C $\frac{(-3)(4)}{(6)}$
D $\frac{(-3)(4)}{(-6)}$
- Philip played a board game, and he drew 4 straight cards that read, "Go back 8 spaces." What is the change in Philip's position on the game board?
A -136 spaces
B -32 spaces
C 46 spaces
D 104 spaces
- Manuel played an arcade game that cost 25 tokens per game. In six games, Manuel won 0 tokens, 10 tokens, 50 tokens, 0 tokens, 5 tokens, and 10 tokens. What is the change in the number of tokens Manuel has?
A -85
B -75
C 75
D 90
- The low temperature for 5 days was -5° , -7° , -2° , 2° , and -3° . What was the average low temperature for those days?
A -4° C -2°
B -3° D -1°
- A football team was given 3 penalties for 15 yards each and 2 penalties for 5 yards each. What was the total change in their field position from these penalties?
A -85 yd
B -75 yd
C -55 yd
D -20 yd
- Amy bought 3 pounds of lemons at \$2 per pound, a box of rice for \$4, and 7 frozen dinners for \$3 each. What is the change in the amount of money she has?
A -\$39
B -\$31
C -\$9
D \$31

MODULE
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Multiplying and Dividing Integers

10. In 1924, the temperature in Fairfield, Montana, dropped from 63 degrees to -21 degrees in 12 hours. What was the average hourly change in temperature?
- _____
11. a. Write a multiplication expression containing at least 3 terms that has a negative answer.
- _____
- b. How could you change this expression so that it has a positive answer?
- _____
12. Doug lost his measuring tape, so he had to estimate the length of a board he had to cut. He cut off 2 inches, but the board was still too long. He did this 4 times. After the fourth cut, the board was the right length. Write and find the value of an expression to find the change in the length of the board.
- _____
13. The panda at the zoo became ill and lost 4 pounds every week for 5 weeks. In the sixth week, she began to feel better and gained 3 pounds. Write and find the value of an expression for the change in the panda's weight over these 6 weeks.
- _____
14. Over 8 days, the price of a share of XYZ Company stock fell \$72. On the ninth day, the price rose \$4, but on the tenth day, it fell \$12. Write and find the value of an expression for the average change in the price of the stock for these 10 days.
- _____
15. The Salton Trough has an elevation of 69 meters below sea level. The Dead Sea Depression is almost 6 times deeper. Write and find the value of an expression for the approximate elevation of the Dead Sea Depression.
- _____
16. Race car driver Mario won 3 races and earned 75 points for each win. During the fourth race, he had deductions of 55 points, 104 points, and 85 points, but earned 3 points for finishing. Write and find the value of an expression for how many points he has now.
- _____
17. Deepak bought a new video game. While he learned how to play, he played 6 games and had a combined score of -1,044 points. Write and find the value of an expression for the average number of points he lost in the first 6 games.
- _____
18. For 8 days of very hot weather, the water level in a lake dropped 3 inches per day. On the ninth day, storms raised the level 6 inches. Write and find the value of an expression for the change in the water level of the lake during these 9 days.
- _____
19. Marla has a piece of fabric. She cuts off 8 inches and makes a bow for each of the dogs she grooms. Today she groomed 12 dogs. Write and find the value of an expression for the change in the length of the fabric.
- _____