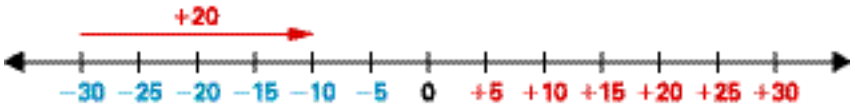
Chapter Review

Frequently Asked Questions

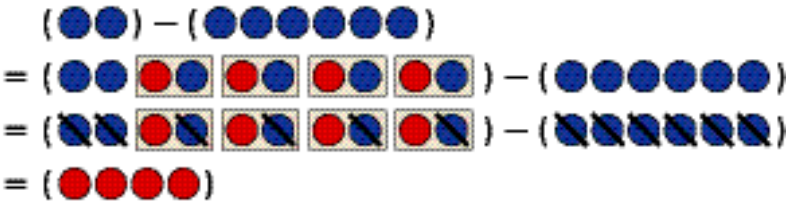
Q: How do you subtract integers, such as (−10) − (−30)?

A: Using a number line, find the distance from the second number to the first number. If the arrow joining the starting point to the ending point goes to the left, the answer is negative. If the arrow goes to the right, the answer is positive.



Q: How do you subtract integers, such as (−2) − (−6)?

A: Represent the question with counters. Add enough zero pairs (a red counter and a blue counter) to complete the subtraction. The counters that remain after doing the subtraction represent the answer.



Q: How do you subtract greater integers?

A: For greater integers, use a calculator. For example, use a calculator to subtract (−439) − (−247). A typical calculator solution would involve the following key presses:

439 [+/−] [−] 247

[+/−] [=]

Practice Questions

(6.1) **1.** Draw a number line with integers from -10 to $+10$. Mark each integer described below on the number line.

a) six more than negative two

b) three less than positive five

c) four more than negative four

(6.1) **2.** Use $<$ or $>$, where possible. If it is not possible, explain why.

a) (-1) ▢ (-30)

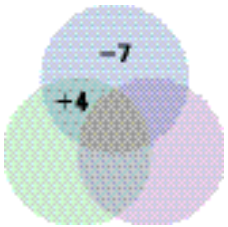
b) $(+12)$ ▢ (-10)

c) $(+2)$ ▢ (-2)

(6.1) **3.** Two integers are 18 numbers apart on a number line. Can both integers be one-digit integers? Explain your thinking, and give examples.

(6.3) **4.** Write three different addition or subtraction questions with a result of -2.

(6.3) **5.** Place each integer, -5, -3, 0, $+1$, $+2$, in one of the remaining regions of the overlapping circles so that each circle adds to 0.



(6.5) **6.** A company's stock changes value as shown. At the end of June, how much more or less was the stock worth than on January 1?

Month	Jan.	Feb.	Mar.	Apr.	May	June
Stock price change ($)	up 4	up 5	down 2	down 10	up 5	up 1

(6.5) **7.** Calculate.

a) $(-128) + (-65) + (-38)$

b) $(-373) + (-208) + (+12)$

8. Calculate. (6.6)

a) $(+7) - (-4) + (+5)$

b) $(-10) + (-3) - (+4)$

c) $(+50) - (-80)$

d) $(+400) + (-20)$

9. Imagine that ▢ represents an integer. Which is greater, ▢ $-$ 1 or ▢ $+$ 1? Explain your reasoning. (6.6)

10. Calculate. Which result is the greatest? Which result is the least? (6.6)

a) $(+4) - (+2)$ **c)** $(+6) - (-3)$

b) $(-7) - (+4)$ **d)** $(-3) - (-5)$

11. Write an equation that has a result of $+10$. Use addition and subtraction signs and these integers: (6.6)

$-18, -11, -3, -2, +4$

12. Complete each ▢ with an integer to make the equation true. Find three different solutions. (6.6)

▢ $+$ ▢ $+$ ▢ $= (-4)$

13. How is subtracting integers like adding integers? How is it different? (6.6)

14. Add or subtract. Use a model. (6.7)

a) $(+8) + (-3)$ **c)** $(-7) + (+6)$

b) $(-8) - (-3)$ **d)** $(+2) - (+4)$

15. One integer is 5 more than another integer. The sum of the two integers is -13. What are the two integers? (6.7)

16. Explain how you could carry out each integer calculation using a calculator without a sign change (+/−) key. (6.7)

a) $(-117) + (-296)$

b) $(-984) + (+318)$

c) $(-827) - (-513)$