LESSON 1.5

Adding Integers

BEFORE | Now | WHY?

You added decimals. | You'll add integers. | So you can find a hockey player's plus-minus rating, as in Ex. 40.

Vocabulary
additive inverse, p. 30

+ + + → +

− + − → −

+ + − < + (if more +)
− (if more neg)

1

LESSON 1.5

Name _____ Date _____

Practice A

For use with pages 28–33

Tell whether the sum is positive or negative. You do not need to find the sum.

1. $-16 + 43$

2. $-12 + (-9)$

3. $7 + (-32)$

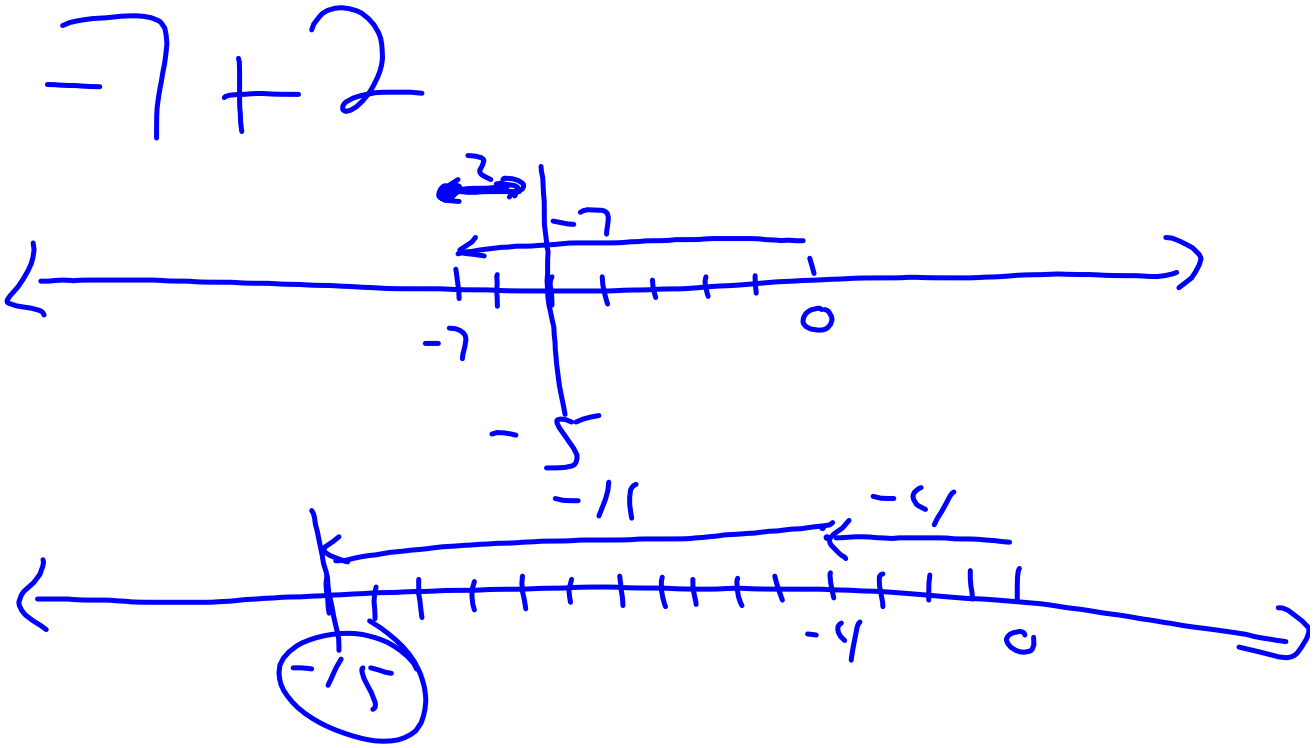
4. $-17 + 13$

$-16 + 43 \rightarrow$ pos

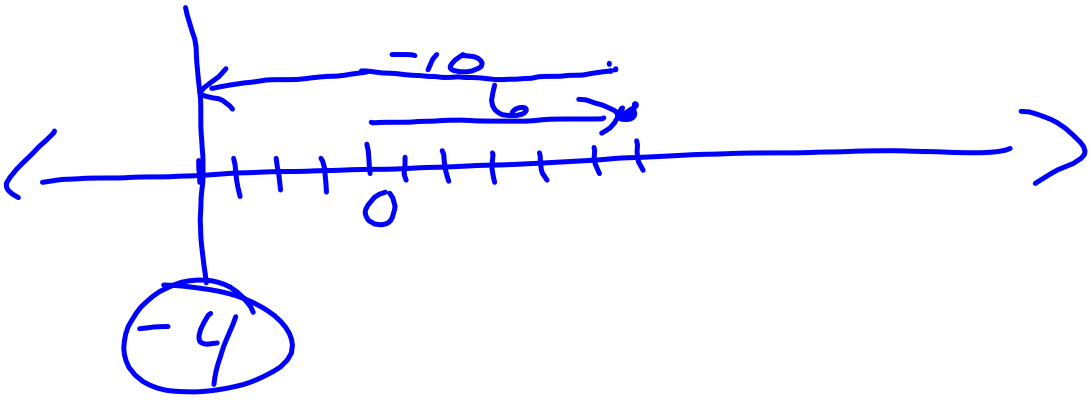
$7 + -32 \rightarrow$ neg

Use a number line to find the sum.

5. $-7 + 2$ **6.** $-8 + 3$ **7.** $-4 + (-11)$



8. $-5 + (-13)$ **9.** $6 + (-10)$ **10.** $15 + (-9)$



11. $-12 + (-1)$

12. $7 + (-14)$

13. $8 + (-6)$

Find the sum.

14. $-21 + (-46)$ **15.** $-18 + (-53)$ **16.** $23 + (-40)$

$-18 + -53 = -71$

17. $19 + (-17)$ **18.** $-27 + 35$ **19.** $-24 + 17$

$19 + 17 = +2$

$= 2$

$-24 + 17 = -7$

20. $-33 + 48$ **21.** $29 + (-13)$ **22.** $41 + (-37)$

$29 + -13 = 16$

Evaluate the expression when $x = -7$ and $y = 6$.

23. $x + 11$ **24.** $x + (-20)$ **25.** $-9 + x$

$-7+11$

4

$-9+-7$

-16

26. $x + y$

27. $y + (-12)$

28. $-23 + y$

$6 + -12$

-6

29. You have a checking account. Your balance is \$95. You withdraw \$32, deposit \$80, and withdraw \$25. Write an integer to represent each value. Then find the final balance in your account.

$95, -32, 80, -25$

$95 + -32 + 80 + -25$

$63 + 80 + -25$

$143 + -25$

118

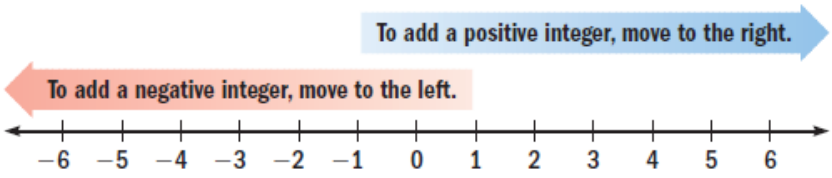
30. In consecutive plays, a football team gains 5 yards, loses 3 yards, loses 1 yard, and gains 6 yards. Write an integer to represent each value. What is the net gain for the drive?

$5, -3, -1, 6$

$5 + -3 + -1 + 6$

7

One way to add integers is to use a number line.



Absolute Values You can use absolute values to find the sum of two or more integers.

Adding Integers

Words	Numbers
1. **Same Sign** Add the absolute values and use the common sign.	$8 + 12 = 20$ $-6 + (-4) = -10$
2. **Different Signs** Subtract the lesser absolute value from the greater absolute value and use the sign of the number with greater absolute value.	$5 + (-8) = -3$ $-11 + 13 = 2$
3. **Opposites** The sum of a number and its opposite is 0.	$7 + (-7) = 0$

Additive Inverse Property The opposite of a number is also called its **additive inverse**. Item 3 in the notebook can be written algebraically as $a + (-a) = 0$ and is called the *additive inverse property*.