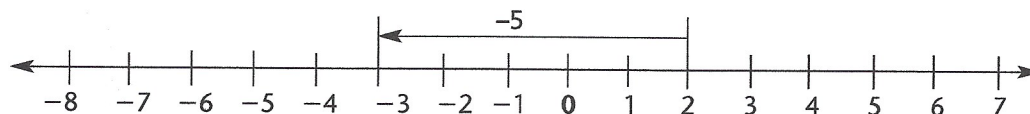
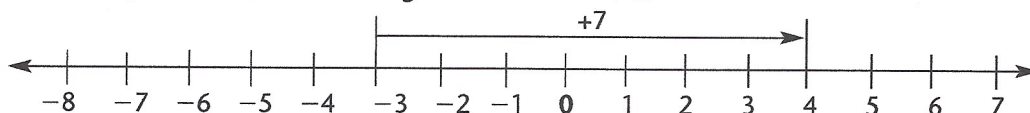


# Adding Integers

**EXAMPLE**Add  $2 + (-5)$ .Start at 2, move 5 units to the *left*. The answer is  $-3$ .Add  $-3 + 7$ .Start at  $-3$ , move 7 units to the *right*. The answer is 4.**Directions** Answer the questions.

1. To add a *negative* number, in which direction do you count on the number line? \_\_\_\_\_
2. To add a *positive* number, in which direction do you count on the number line? \_\_\_\_\_

**Directions** Write each sum on the blank.

3.  $-4 + 4$  \_\_\_\_\_

4.  $1 + (-7)$  \_\_\_\_\_

5.  $1 + 5$  \_\_\_\_\_

6.  $0 + 6$  \_\_\_\_\_

7.  $-1 + (-5)$  \_\_\_\_\_

8.  $5 + (-11)$  \_\_\_\_\_

9.  $-5 + 3$  \_\_\_\_\_

10.  $-6 + 3$  \_\_\_\_\_

11.  $11 + (-12)$  \_\_\_\_\_

12.  $-2 + (-4)$  \_\_\_\_\_

13.  $-6 + 6$  \_\_\_\_\_

14.  $6 + (-6)$  \_\_\_\_\_

15.  $-4 + 8$  \_\_\_\_\_

16.  $-6 + 12$  \_\_\_\_\_

17.  $-2 + 6$  \_\_\_\_\_

18.  $-3 + 9$  \_\_\_\_\_

19.  $7 + 7$  \_\_\_\_\_

20.  $2 + (-8)$  \_\_\_\_\_

# Subtracting Integers

**EXAMPLE**Find the difference:  $14 - (-15)$ **Rule** To subtract in algebra, add the opposite.15 is the opposite of  $-15$ .

$$14 + 15 = 29$$

**Directions** Rewrite each expression as addition. Solve the new expression.

1.  $-4 - (-11)$  \_\_\_\_\_

2.  $9 - (+3)$  \_\_\_\_\_

3.  $-1 - 13$  \_\_\_\_\_

4.  $-6 - (+10)$  \_\_\_\_\_

5.  $7 - (-10)$  \_\_\_\_\_

6.  $4 - (+4)$  \_\_\_\_\_

7.  $2 - (+8)$  \_\_\_\_\_

8.  $-11 - (-1)$  \_\_\_\_\_

9.  $6 - (+2)$  \_\_\_\_\_

10.  $-5 - (-5)$  \_\_\_\_\_

11.  $2 - (+9)$  \_\_\_\_\_

12.  $1 - (+4)$  \_\_\_\_\_

13.  $6 - 8$  \_\_\_\_\_

14.  $-8 - (-3)$  \_\_\_\_\_

15.  $-3 - (+7)$  \_\_\_\_\_

16.  $8 - (-7)$  \_\_\_\_\_

17.  $10 - (+5)$  \_\_\_\_\_

18.  $5 - 6$  \_\_\_\_\_

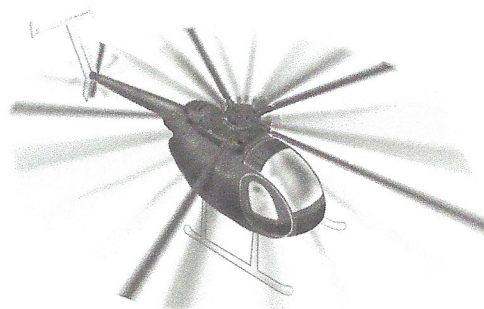
**Directions** Solve these problems. Write an expression and the answer.

19. Dara's kite is flying 67 feet high. Jill's is flying 40 feet high. What is the difference between the heights of these two kites?

\_\_\_\_\_

20. A helicopter hovers 60 m above the ocean's surface. A submarine is resting 30 m underwater, directly below the helicopter. What is the difference between the positions of these two objects?

\_\_\_\_\_



# Multiplying Integers

**Directions** Find and write each difference.

1.  $-2 - (+9)$  \_\_\_\_\_

2.  $5 - (+2)$  \_\_\_\_\_

3.  $19 - 5$  \_\_\_\_\_

4.  $-11 - (-3)$  \_\_\_\_\_

5.  $8 - (+7)$  \_\_\_\_\_

6.  $-6 - 16$  \_\_\_\_\_

7.  $6 - (+2)$  \_\_\_\_\_

8.  $20 - (-11)$  \_\_\_\_\_

9.  $-4 - (+8)$  \_\_\_\_\_

10.  $7 - (-2)$  \_\_\_\_\_

11.  $-1 - (+7)$  \_\_\_\_\_

12.  $23 - 13$  \_\_\_\_\_

13.  $-3 - (+4)$  \_\_\_\_\_

14.  $-9 - (+10)$  \_\_\_\_\_

**Directions** Find and write each product.

15.  $(-14)(1)$  \_\_\_\_\_

16.  $(6)(0)$  \_\_\_\_\_

17.  $(-7)(6)$  \_\_\_\_\_

18.  $(5)(-9)$  \_\_\_\_\_

19.  $(3)(13)$  \_\_\_\_\_

20.  $(-7)(-7)$  \_\_\_\_\_

21.  $(-5)(-3)$  \_\_\_\_\_

22.  $(0)(-44)$  \_\_\_\_\_

23.  $(-8)(2)$  \_\_\_\_\_

24.  $(-1)(-18)$  \_\_\_\_\_

25.  $(3)(-11)$  \_\_\_\_\_

26.  $(-4)(-10)$  \_\_\_\_\_

27.  $(7)(4)$  \_\_\_\_\_

28.  $(12)(-3)$  \_\_\_\_\_

**Directions** Solve these problems.

29. One computer in Mrs. Wu's classroom has a connection to the Internet. Using this computer, each student can spend 5 minutes visiting Web sites. If the class has 10 students, how long (in minutes) is the Internet connection in use?

\_\_\_\_\_

30. When Dee's pool is drained, she can see 3 depth marks below the water line. Each mark is labeled  $-3$  to represent 3 feet under water. Write an expression to show how Dee can calculate the pool's depth.

\_\_\_\_\_

## Dividing Positive and Negative Integers

**EXAMPLE**

Notice the possible combinations for dividing positive and negative integers.

$$\text{positive} \div \text{positive} = \text{positive} \quad 6 \div 2 = 3$$

$$\text{positive} \div \text{negative} = \text{negative} \quad 6 \div -2 = -3$$

$$\text{negative} \div \text{positive} = \text{negative} \quad -6 \div 2 = -3$$

$$\text{negative} \div \text{negative} = \text{positive} \quad -6 \div -2 = 3$$

Dividing 0 by any integer, positive or negative, produces 0 as the quotient.

**Directions** Tell whether the quotient is *positive*, *negative*, or *zero*.

1.  $16 \div -4$  \_\_\_\_\_

2.  $-63 \div -9$  \_\_\_\_\_

3.  $-10 \div 2$  \_\_\_\_\_

4.  $33 \div 11$  \_\_\_\_\_

5.  $-12 \div 4$  \_\_\_\_\_

6.  $100 \div 10$  \_\_\_\_\_

7.  $36 \div -9$  \_\_\_\_\_

8.  $15 \div -5$  \_\_\_\_\_

9.  $-27 \div 3$  \_\_\_\_\_

10.  $0 \div -4$  \_\_\_\_\_

11.  $-81 \div -9$  \_\_\_\_\_

12.  $19 \div -1$  \_\_\_\_\_

13.  $56 \div 8$  \_\_\_\_\_

14.  $500 \div 5$  \_\_\_\_\_

15.  $32 \div -8$  \_\_\_\_\_

**Directions** Find and write each quotient.

16.  $36 \div 12$  \_\_\_\_\_

17.  $21 \div -7$  \_\_\_\_\_

18.  $18 \div -3$  \_\_\_\_\_

19.  $-35 \div 7$  \_\_\_\_\_

20.  $-24 \div 2$  \_\_\_\_\_

21.  $-16 \div -8$  \_\_\_\_\_

22.  $45 \div -9$  \_\_\_\_\_

23.  $-200 \div -200$  \_\_\_\_\_

24.  $-50 \div 10$  \_\_\_\_\_

25.  $27 \div -9$  \_\_\_\_\_

26.  $-14 \div 2$  \_\_\_\_\_

27.  $0 \div 16$  \_\_\_\_\_

28.  $-72 \div -9$  \_\_\_\_\_

29.  $-1 \div -1$  \_\_\_\_\_

30.  $9 \div 3$  \_\_\_\_\_