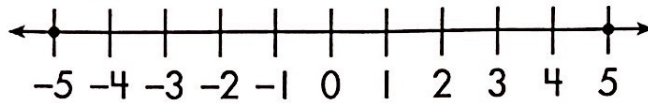


Lesson 4.1 Integers as Opposite Numbers

Every positive number has an opposite, negative number. A negative number is less than 0.



Draw a number line to show the opposite of each number.

a

1. What is the opposite of 8?

-8

2. What is the opposite of -10?

10

3. What is the opposite of 12?

-12

4. What is the opposite of -6?

6

5. What is the opposite of 11?

-11

6. What is the opposite of -20?

20

b

What is the opposite of 25?

What is the opposite of -7?

What is the opposite of -9?

What is the opposite of 2?

What is the opposite of -14?

What is the opposite of 16?

Name the opposite of each number.

7. The opposite of 10 is -10.8. The opposite of -3 is 3.9. The opposite of -4 is 4.10. The opposite of 13 is -13.11. The opposite of -32 is 32.12. The opposite of 17 is -17.

The opposite of 1 is _____.

The opposite of 7 is _____.

The opposite of -8 is _____.

The opposite of -15 is _____.

The opposite of 27 is _____.

The opposite of -20 is _____.

Lesson 4.3 Absolute Value

The **absolute value** of a number is its distance from zero.

Absolute value is represented by vertical lines on either side of an integer.

What is the absolute value of 8? $|8| = 8$

What is the absolute value of -8? $|-8| = 8$

Find the absolute value of each integer.

- | a | b | c |
|-------------------------------|-------------------------------------|-------------------------------------|
| 1. $ 4 = \underline{4}$ | $ -13 = \underline{\hspace{2cm}}$ | $- 10 = \underline{\hspace{2cm}}$ |
| 2. $- -7 = \underline{-7}$ | $ 11 = \underline{\hspace{2cm}}$ | $ -2 = \underline{\hspace{2cm}}$ |
| 3. $- 12 = \underline{-12}$ | $- 5 = \underline{\hspace{2cm}}$ | $ 1 = \underline{\hspace{2cm}}$ |
| 4. $ -14 = \underline{14}$ | $- 8 = \underline{\hspace{2cm}}$ | $- -13 = \underline{\hspace{2cm}}$ |
| 5. $ 3 = \underline{3}$ | $ -7 = \underline{\hspace{2cm}}$ | $- 4 = \underline{\hspace{2cm}}$ |
| 6. $- -15 = \underline{-15}$ | $ 9 = \underline{\hspace{2cm}}$ | $ -12 = \underline{\hspace{2cm}}$ |
| 7. $ 16 = \underline{16}$ | $ -6 = \underline{\hspace{2cm}}$ | $- 20 = \underline{\hspace{2cm}}$ |
| 8. $- 40 = \underline{-40}$ | $- -24 = \underline{\hspace{2cm}}$ | $ 17 = \underline{\hspace{2cm}}$ |
| 9. $ 33 = \underline{33}$ | $- -41 = \underline{\hspace{2cm}}$ | $ -19 = \underline{\hspace{2cm}}$ |
| 10. $ 26 = \underline{26}$ | $ -18 = \underline{\hspace{2cm}}$ | $- 35 = \underline{\hspace{2cm}}$ |
| 11. $- 53 = \underline{-53}$ | $ -21 = \underline{\hspace{2cm}}$ | $ 30 = \underline{\hspace{2cm}}$ |
| 12. $ 25 = \underline{25}$ | $- -21 = \underline{\hspace{2cm}}$ | $ -47 = \underline{\hspace{2cm}}$ |