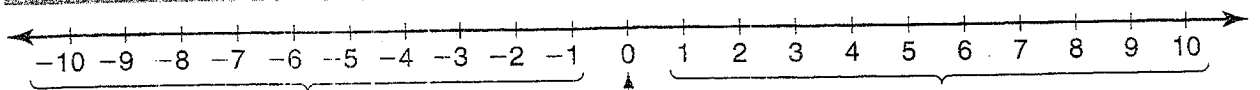


Understanding Integers



Negative integers

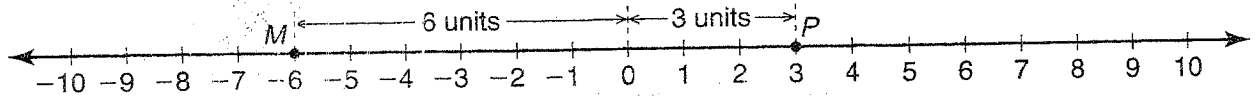
These are the opposites of positive integers.

Zero is neither positive nor negative. The opposite of 0 is 0.

Positive integers

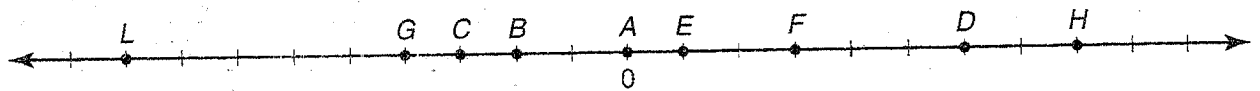
These are also called the counting numbers.

The absolute value of an integer is its distance from zero. Absolute value is always positive. The absolute value of -6 is written like this: $|-6|$.



On the number line above, point M is located at -6 . Because it is 6 units from 0, its absolute value is 6.

Point P is located at 3 on the number line. Because it is 3 units from 0, its absolute value is 3.

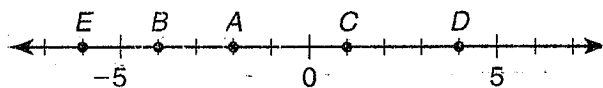


For 1–9, use the number line above. Write the integer for each point. Then give its opposite and absolute values.

- | | |
|--------------|--------------|
| 1. B _____ | 2. H _____ |
| 3. C _____ | 4. F _____ |
| 5. A _____ | 6. E _____ |
| 7. G _____ | 8. D _____ |
| 9. L _____ | |

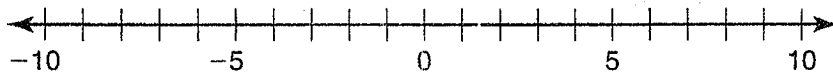
10. **Number Sense** John borrowed \$6 from Adam. The next week John borrowed \$15 more from Adam. Write an integer that represents John's total debt to Adam. _____

Understanding Integers



Use the number line. Write the integer for each point. Then give its opposite and absolute value.

1. A _____
2. B _____
3. C _____
4. D _____
5. E _____
6. On the number line, graph the points -8 , 3 , -4 , 2 , and -1 .



The table gives the highest and lowest temperatures for some states in the United States. Use integers to describe the two temperatures for each state.

Record Temperatures
(in degrees, relative to zero)

State	Highest	Lowest
Alabama	112 above	27 below
Delaware	110 above	17 below
Hawaii	100 above	12 above
Colorado	118 above	61 below

7. Delaware _____
8. Hawaii _____
9. Colorado _____
10. Alabama _____

Test Prep

11. Which is an integer?
 A. -0.5 B. -5 C. 5.5 D. $5\frac{4}{5}$
12. **Writing in Math** In your own words, tell what is meant by “the absolute value of an integer.”

