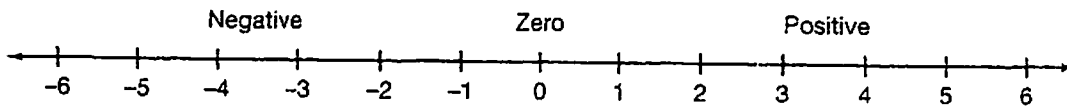




SKILL 1: Integers on the Number Line

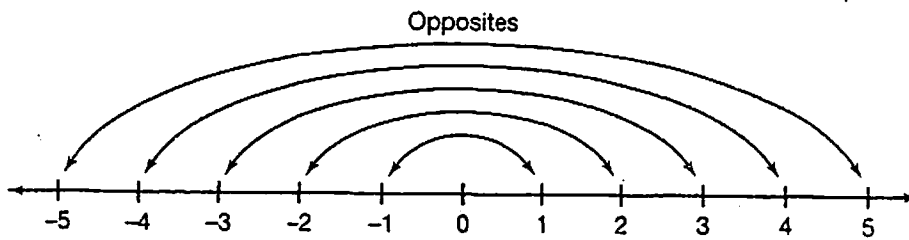
A **positive** number is a number that is greater than 0. The positive numbers 1, 2, 3, and so on, are shown to the right of 0 on the number line. They may be written with or without a "+" symbol.

A **negative** number is a number that is less than 0. Negative numbers must be written with a "-" symbol before the numeral. The negative numbers -1 , -2 , -3 , and so on, are shown to the left of 0 on the number line.



The negative number -3 is read *negative 3*; -4 is read *negative 4*, and so on. The number 0 is neither positive nor negative. The number 0, the positive whole numbers (1, 2, 3, . . .), and the corresponding negative numbers (-1 , -2 , -3 , . . .) are **integers**.

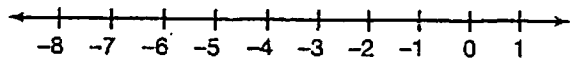
Two integers on opposite sides of 0 but the same distance from 0 are called **opposites**. For example, the opposite of -9 is 9, and the opposite of 6 is -6 . The number 0 is its own opposite.



Integers are used for describing gains and losses, temperatures above and below 0° , and many other quantities that are "opposites."

Guided Practice

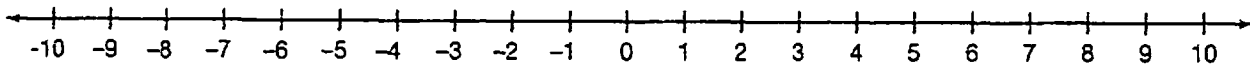
1. The number -7 is to the left of 0 on the number line, so -7 is a _____ number.



2. The opposite of -7 is the number 7 units to the _____ of 0. So, the opposite of -7 is _____.

SKILL 1: Practice

Think about where each integer is located on the number line.
Tell whether the integer is positive, negative, or neither.



- | | | |
|---------------|--------------|-----------------|
| 1. -6 _____ | 2. -10 _____ | 3. 50 _____ |
| 4. 8 _____ | 5. -37 _____ | 6. -100 _____ |
| 7. 9 _____ | 8. 43 _____ | 9. 250 _____ |
| 10. -21 _____ | 11. 0 _____ | 12. 1,000 _____ |

Write the opposite of each integer.

- | | | |
|---------------|---------------|----------------|
| 13. 18 _____ | 14. 0 _____ | 15. 160 _____ |
| 16. -25 _____ | 17. -48 _____ | 18. -83 _____ |
| 19. -16 _____ | 20. -2 _____ | 21. -76 _____ |
| 22. -5 _____ | 23. 11 _____ | 24. -125 _____ |

Write the integer that best describes each situation.

- | | |
|-------------------------------------|----------------------------|
| 25. 35 ft below sea level _____ | 26. 78°F above zero _____ |
| 27. A gain of \$60 _____ | 28. A debt of \$20 _____ |
| 29. 8-yard loss _____ | 30. \$80 profit _____ |
| 31. 3 seconds before lift-off _____ | 32. 7 steps backward _____ |



33. Which integer is the opposite of -12?

- | | |
|-------|------|
| A -21 | C 12 |
| B -12 | D 21 |

Skill 1

34. Which integer is neither positive nor negative?

- | | |
|------|------|
| F -1 | H 1 |
| G 0 | J 10 |

Skill 1