

Benchmarks

A **benchmark** is a number that may have a special meaning and helps you think about other numbers.

For example, 24 is the number of inches in two feet, the number of hours in one day, and the number of objects in two dozen. You can use these meanings to help you think of different ways to use 24.



Name something that helps you attach meaning to each number.

1. $\frac{1}{4}$ _____

2. 60 _____

3. 7 _____

4. 15% _____

5. $.33\frac{1}{3}$ _____

6. 365 _____

7. 144 _____

8. $\frac{1}{12}$ _____

9. 0.01 _____

10. 1 hour _____

11. 1 minute _____

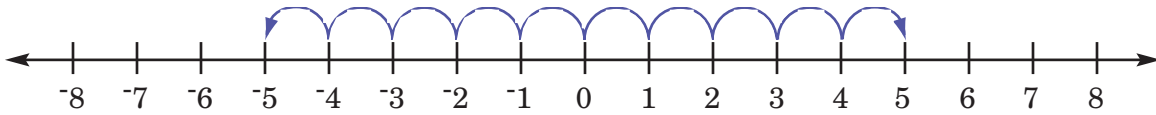
12. 1 second _____

Challenger

Pick your own personal benchmark and describe what this number means to you. Your benchmark may be a whole number, fraction, decimal, or percent.

Thinking About Integers

An **integer** can be a positive whole number, a negative whole number, or zero. The opposite of any integer is the same distance from zero as the number.



For example, -5 and 5 are both five units from 0 . So -5 and 5 are opposites.

Write a positive or negative integer to represent each of the following.

- | | | | |
|--------------------------|-------|--------------------------------|-------|
| 1. 55 degrees above zero | _____ | 4. a bill for \$18 | _____ |
| 2. 10 years ago | _____ | 5. a climb of 86 feet | _____ |
| 3. a prize of \$25 | _____ | 6. 2,500 yards below sea level | _____ |

Write *positive* or *negative* to tell what the result in each situation would be. Then explain how you know.

7. The temperature was 2 degrees above zero. Then it dropped 5 degrees.

8. Mark stood on a diving board 10 feet above the water. He dived and touched the bottom of the pool, which was 15 feet deep.

9. Tyler had a score of 34 in a dart game. Then he threw 3 darts in a row into the -10 part of the dart board.

10. Pam had \$25.00 in her checking account. Then she wrote a check for \$30.00.



Challenger

Put these integers in order from greatest to least: -12 , 14 , 0 , 12 , -7 , 3 , 4 , 5 , 6 , -1 , -2 , -3 , -9 , 8 , 9 . You can use a number line.