

Numbers Between

The whole numbers that are between 7 and 13 are 8, 9, 10, 11, and 12.

The difference between 13 and 7 is 6.

$$13 - 7 = 6$$

Half this difference is 3.

$$6 \div 2 = 3$$

The number 10 is halfway between 7 and 13.

$$7 + 3 = 10 \quad \text{or} \quad 13 - 3 = 10$$

1. What are the whole numbers between

- a) 68 and 72?
- b) 108.3 and 111.6?

2. What number is halfway between the given numbers?

- a) 70 and 170
- b) 1801 and 1813
- c) 18.4 and 6.2

3. Is the number in the box closer to the number on the left or the one on the right? How do you know?

a) 30 38 40

b) 0.6 3.4 6.6

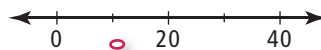
c) 0.891 0.732 0.641

d) 78.68 78.22 77.77

Number Lines

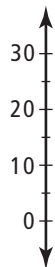
Number lines can show the position of one number compared with other numbers. Number lines can be horizontal or vertical. It is important to know what the smallest interval or subdivision on a number line represents.

The smallest interval on this number line is 10. Check by counting by 10s.



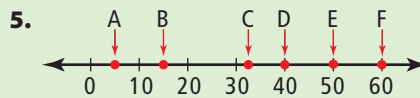
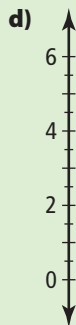
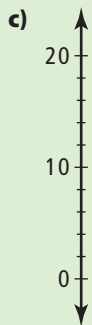
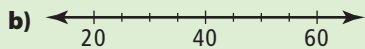
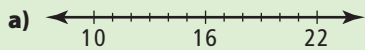
Ten is halfway between 0 and 20.

The smallest interval on this number line is 5. Check by counting by 5s.



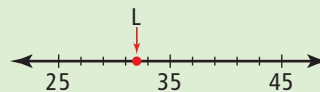
Five is halfway between 0 and 10.

4. For each number line, what does the smallest interval represent? How do you know?



- a) What letter is at 5?
- b) What number is located at B?
- c) What number is halfway between D and F?
- d) If C is halfway between B and E, what number does C represent? How did you find the answer?

6. What are three things you know for sure about the number located at L?



Compare and Order Numbers

Words, symbols, or a number line can be used to compare and order numbers.

The number line shows the numbers 2, 1.9, and 2.4.

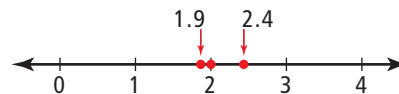
The number 2 lies between 1.9 and 2.4

From smallest to largest the numbers are 1.9, 2, and 2.4.

$$1.9 < 2 < 2.4$$

From largest to smallest the numbers are 2.4, 2, and 1.9.

$$2.4 > 2 > 1.9$$



The symbol $<$ means "is less than."

The symbol $>$ means "is greater than."

Use $<$, $=$, or $>$ to make each statement true.

7. a) $28 \blacksquare 30$

b) $280.1 \blacksquare 279.9$

c) $37 \blacksquare 37.0$

d) $\frac{1}{8} \blacksquare \frac{3}{8}$

8. Write a correct mathematical statement using the symbol $<$ or $>$ to show the numbers 1.7, 1.71, and 1.701 arranged in order from largest to smallest.

9. Connor lives 1527 m from school. Kazimir lives 1487 m from school. Simon lives 1498 m from school. Arrange the boys in order of their distance from school from shortest to longest.

10. Alicia is 6 cm taller than Andrea. Pat is 4 cm taller than Alicia.

- a) Arrange the three students in order from shortest to tallest.
- b) If Alicia is 84 cm tall, how tall is Pat?