

**Geometry**

**Line-Segment, Ray and Line**

Definition of in Line-segment, ray and line geometry:

The part of a line is called a line-segment as shown below.



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Only one line can be drawn passing through any two points but a number of lines can be drawn through a point.



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| --- | --- | --- | --- |
|  **Line AB** |

|  |  |
| --- | --- |
|  **Lines passing through a point O** |  **Line segment CD** |

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**Ray:** We know about sun-rays. A sun-ray starts from the sun and goes on a direction up to endless space. Similarly a geometrical ray is considered a special kind of line which starts from a fixed point and goes to any distance to the other direction of the starting point.



Distinction between line-segment, ray and line:

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| **Line-segment****1.** It has two end points.**2.** The length of a line-segment is definite. So, it can be measured.**3.** The symbol of a line-segment is \_\_\_\_\_ | **Ray****1.** Ray has one starting point and another near the arrowhead.**2.** It has a starting point but no other end point. So, its length cannot be measured.**3.** The symbol of a ray is → | **Line****1.** There are no end points in a line.**2.** There are no end points. So, length of a line cannot be measured.**3.** The symbol of a line is ↔ |