

The Boston Marathon is the oldest annual marathon in the world. The first Boston Marathon was run on April 19, 1897 with a distance of 24.5 miles; the race started at Metcalf's Mill in Ashland and ended at the Irvington Oval in Boston. In 1924, to conform to the Olympic standard, the starting line was moved from Ashland to Hopkinton in order to extend the length of the race to 26 miles, 385 yards; the distance of the Boston Marathon has not changed since then. In 1899, the finish line was moved to Exeter Street, between Boylston Street and St. James Street, so that runners passed the Exeter Street entrance of the Boston Athletic Association's ornate brownstone clubhouse. From 1965 to 1985, the finish line was in front of the Prudential Center Plaza while the Prudential Insurance Company was a major sponsor. Since 1985, when the John Hancock Mutual Life Insurance Company replaced the Prudential Insurance Company as a major sponsor, the finish line for the Boston Marathon has been in front of the Boston Public Library on Boylston Street, near the John Hancock Building.[▲]

$$1 \text{ rod} = 5.5 \text{ yards}$$

$$4 \text{ rods} = 1 \text{ chain}$$

$$110 \text{ fathoms} = 1 \text{ furlong}$$

$$1 \text{ furlong} = 10 \text{ chains}$$

$$1 \text{ league} = 24 \text{ furlongs}$$

$$1 \text{ mile} = 1760 \text{ yards}$$

Use the measurements provided above to determine the length of the Boston Marathon in the requested units.

(a) What is the length of the Boston Marathon in yards?

(b) Using the result from part **(a)**, determine the length of the Boston Marathon in *fathoms*.

[▲] <http://www.baa.org/races/boston-marathon/boston-marathon-history.aspx>
<https://www.runnersworld.com/newswire/the-history-of-the-boston-marathon-finish-line>

<http://www.cryan.com/blog/20160331.jsp>
<https://sabr.org/bioproj/park/dartmouth-street-grounds>