Answer on Question #68392-Physics-Other

Maria and Lucas measure their training distance with a stick, which is 5 feet and 2 inches long. The stick fits in 254 times. What is the run called in Europe? How many rounds do Maria and Lucas have to run, until they put a mile back?

Solution

The length of the stick is

$$l = 5 \, ft. \; 2 \, in. = \left(5 + \frac{2}{12}\right) ft = \frac{31}{6} ft = \frac{31}{6} 0.3048 \, m = 1.5748 \, m.$$

The number of rounds is

$$n = \frac{L}{l} = \frac{1 \, mile}{1.5748 \, m} = \frac{1609 \, m}{1.5748 \, m} \approx 1022.$$