

February 6<sup>th</sup>

In 1980 a man's age was the square root of the number of the year of his birth.

When was he born?

Did he have to join the forces in the First World War or the Second World War?



Algebraically:

Born in Year  $x$

$$\text{Hence, } 1980 - x = \sqrt{x}$$

Squaring both sides

$$32920400 - 3960x + x^2 = x$$

Therefore

$$x^2 - 3961x + 32920400 = 0$$

$$(x - 1936)(x + 2025) = 0$$

$$x = 1936$$

**Therefore he was only 9 WW2 ended, so didn't join either war.**

Or.....

Locating square numbers in the high 1800s, early 1900s

$$43^2 = 1849, 44^2 = 1936, 45^2 = 2025$$

Therefore you would have to draw the same conclusion!