

Quiz:

The very first one appeared in a newspaper on September 11th, 1875. The very first what?

- "Help Wanted" ad
- Crossword Puzzle
- Comic Strip**
- Weather map
- Sports page

Problem

If the difference of two numbers is 10 and their product is 17, what is the sum of their squares?

✗ 134

Hint

Solution:

Let a and b be the two numbers. Then,

$$a - b = 10 \text{ and } ab = 17$$

$$\text{Now, } (a - b)^2 = (a - b)(a - b) = a^2 - 2ab + b^2$$

$$\text{So, } 10^2 = a^2 - 2(17) + b^2$$

$$100 + 34 = a^2 + b^2$$

$$\text{Thus, } a^2 + b^2 = 134$$

Quote:

Whenever you find yourself on the side of the majority, it is time to pause and reflect. Mark Twain