

Answer on Question #38208, Math, Other

Question:

What are those two numbers whose sum is 58 and difference is 28?

Answer:

Suppose two numbers are X and Y . Their sum equals 58 ($X + Y = 58$) and difference equals 28 ($X - Y = 28$):

$$\begin{cases} X + Y = 58 \\ X - Y = 28 \end{cases}$$

Sum of equations equals:

$$X + Y + X - Y = 58 + 28$$

$$2X = 86$$

$$X = 43$$

Difference of equations equals:

$$X + Y - (X - Y) = 58 - 28$$

$$2Y = 30$$

$$Y = 15$$

Answer: 43 and 15