

Answer on Question #42786 – Math - Discrete Mathematics

In a certain village of 1000 houses, 750 have a car, 800 have a refrigerator, 850 have a telephone and 950 have a radio. What is the least number of houses that have all four?

Solution:

Let's find the amount of houses that don't have at least something.

$1000 - 750 = 250$ houses that don't have cars.

$1000 - 800 = 200$ houses that don't have refrigerators.

$1000 - 850 = 150$ houses that don't have telephones.

$1000 - 950 = 50$ houses that don't have radios.

Now let's sum amount of these houses to find the amount of houses that don't have at least something.

$250 + 200 + 150 + 50 = 650$.

Now we will find the amount of houses that will have all four:

$1000 - 650 = 350$.

Answer 350.