

Given: $S = \{s_0, s_1, s_2, s_3 \dots s_{n-1}\}$, k

T which is the solution for this set.

According to the question:

$$S' = \{s_0, s_1, \dots, s_{n-2}\}$$

$$k' = k - s_{n-1}$$

is $T - \{s_{n-1}\}$ is also the solution for Set S'

Answer: Yes.

Because: $T_0 + T_2 + T_3 + \dots + T_n = k$, where $T_n = s_{n-1}$ If s_{n-1} is a member of T .

$$: k - T_n = T_0 + T_2 + \dots T_{n-1}$$

$$: k' = T - \{s_{n-1}\} \Rightarrow \text{the statement is true always.}$$

For example, $S = \{4, 5, 10, 12\}$;

$$k = 22;$$

$$T = \{10, 12\};$$

$$\text{Now, } S' = \{4, 5, 10\};$$

$$K' = K - 12 = 10$$

$$T' = T - \{12\} = \{10\}$$

Here K' is the sum of T' subset.