Problem:

Find the value of the variable and ST if S is between R and T
RS =7a, ST = 12a, RT = 76

Solution:

Let's look at Figure
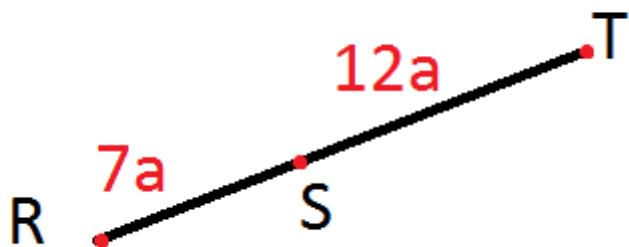
As we know

RT=RS+ST=7a+12a=19a

And RT=76

That's why RT=19a=76   =>   a = 76/19=4

ST=12a=12*4=48

Answer:

a=4

ST=48