Using Step Functions as Switches

Quiz: What is the equation for the function which agrees with f(t) between a and b (assume a < b) and is zero outside this window?

Choices:

a)
$$(u(t-b) - u(t-a))f(t)$$

b)
$$(u(t-a) - u(t-b))f(t-a)$$

c)
$$(u(t-a) - u(t-b))f(t)$$

d)
$$u(t-a)f(t-a) - u(t-b)f(t-b)$$

e) none of these

Pick what you think is the correct choice and then look at the answer.

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