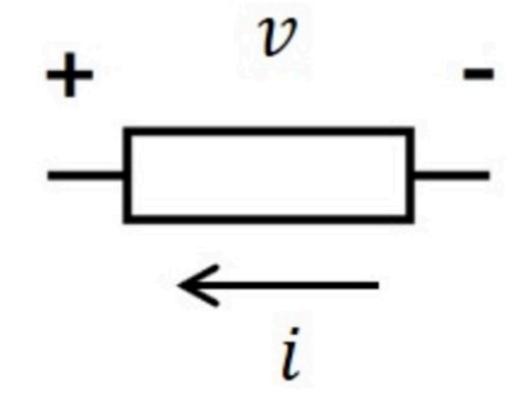Problem has been graded.

Find the energy received by this element between time t = 0 and t = T1.

For this element

$$v(t) = 2\pi \cdot \cos(A1 \cdot \pi \cdot t) \qquad V$$

$$i(t) = A2 \cdot \sin(A1 \cdot \pi \cdot t)$$

(Note: *Hz* is the unit used for frequency. It is equal to s^{-1})

Given Variables:

A1 : 5 Hz

A2 : 3 A

T1 : 2.5 s

Calculate the following:

E (J) :

Hint: Are we using passive sign convention?