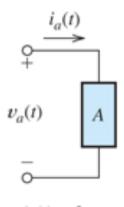
Quiz 1 (3/29/2021) Answers



$$i_a(t) = 2t$$
$$v_a(t) = 10t$$

Q1: Compute the power as a function of time for each of the elements shown in figure?

A.) 5 [W]

B.) 20t² [W]

C.) 20t [W]

D.) 0.2 [W]

Q2: Find the energy transferred between t=0 seconds to t=10 seconds?

A.) 200 [J]

B.) 2000 [J]

C.) 6667 [J]

D.) None of the above

$$E = \int_{0}^{10s} P(t)dt = \frac{20}{3}t^{3}$$

Q3: 3. Is the energy supplied or absorbed by the element 'A'?

A.) Energy supplied by 'A'

B.) Energy absorbed by 'A'