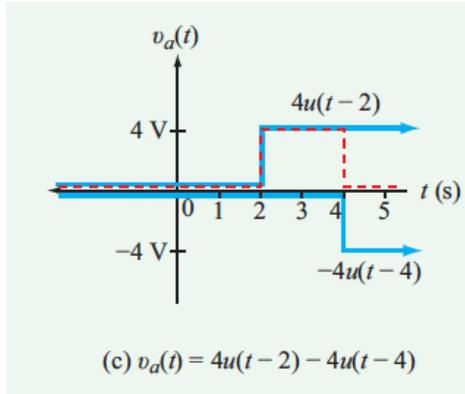


Concept Question 5-4: How are the ramp and rectangle functions related to the step function?

$$r(t) = \int_{-\infty}^t u(t) dt = t u(t),$$

The ramp function is given by the integral of the step function.



The rectangle function is the sum of a positive step that starts at the beginning of the rectangle and a negative step that starts at the end of the rectangle.