

For a system with input x and output y , described by differential equation

$$\dot{x} + x = y$$

what is the system's Transfer function?

(a) $\frac{s+1}{s}$

(b) $\frac{1}{s^2+3s+2}$

(c) $\frac{1}{s+1}$

(d) $\frac{1}{s+s}$

(e) None of the above