



$$\frac{T_2(s)}{T_a(s)} = \frac{100}{s^2 + (111 - 85)s + 100 + 384}$$

$$\text{if } T_a(s) = \frac{1}{s}$$

$$\lim_{t \rightarrow \infty} T_2(s) = \lim_{s \rightarrow 0} s \cdot \frac{100}{s^2 + 26s + 484} \cdot \frac{1}{s} = \frac{100}{484}$$

$$= 0.207$$