Answer on Question #55075, Physics Electric Circuits

a) Calculate the minimum slew rate of the op-amp used for obtaining 2 MHz frequency, 10 V amplitude triangular wave signal at the output.

Solution

The minimum slew rate is given by Eq.(1)

$$\frac{dU}{dt} \approx \frac{\Delta U}{\Delta t} = 2\pi f U = 2 \cdot 3.14 \cdot 2 \cdot 10^6 \cdot 10 = 1.256 \cdot 10^8 V / s = 125.6V / \mu s \tag{1}$$

Answer: $125.6V / \mu$s