

For the patient's ECG we have the convenient case where  $Q(t) = 6R(t) \neq 0$  for all  $t \in [0, 7]$ , so we can compute:

$$M_7 = \int_0^7 \frac{Q(t)}{R(t) \sum_{i=0}^{\infty} (9-7)^{-i}} dt = \int_0^7 \frac{6R(t)}{2R(t)} dt = \int_0^7 3 dt = 21 \quad (1)$$