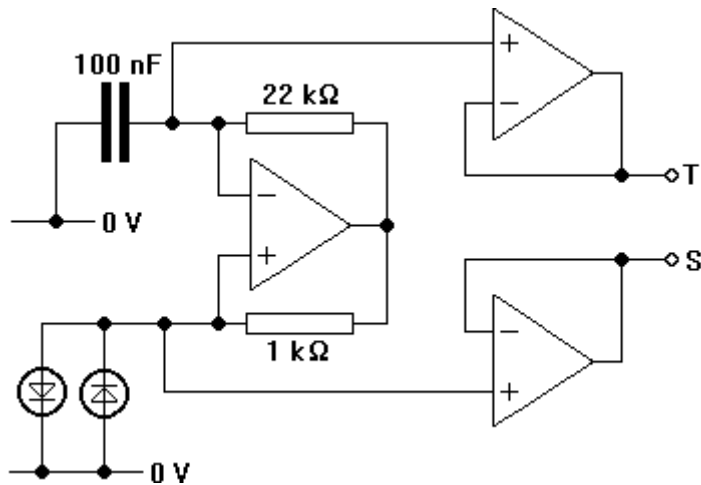


## Mixing waveforms

1. Assemble the signal generator circuit shown below.



2. Use a double-beam oscilloscope to look at T and S. If all is well, both waveforms should have an amplitude of 0.7 V.
3. On a single set of axes, sketch the waveforms at T and S.
4. Sketch the waveform  $T - S$ .
5. Assemble a difference amplifier. Use it to generate the waveform  $T - S$ . Compare it with your prediction.
6. Now sketch the waveform  $2(S + T)$ .
7. Assemble a summing amplifier to generate  $2(S + T)$ . How does its output waveform compare with the one you drew in step 6?