

Q4) In the secondary creep in our graph we take two points on the curve to find its slope

Let's say we take $\Delta l = 84 \text{ mm}$ at $t = 765 \text{ sec}$
and $\Delta l = 33 \text{ mm}$ at $t = 305 \text{ sec}$

we get $\text{slope} = \frac{84-33}{765-305} = 0.11087 \text{ mm/sec}$

but we have to find strain/time \therefore

we divide by original length = 52 mm

to get steady state creep rate

$$= \frac{0.11087}{52} = 0.002132 \text{ /sec or } 0.1279 \text{ /min}$$