

Question 1

$$T_1 \text{ of thermometer} = 10^\circ\text{C}$$

$$T_2 \text{ of thermometer} = 20^\circ\text{C}$$

$$\text{Time taken} = 5 \text{ minutes} = 300 \text{ seconds}$$

$$10^\circ\text{C at } 0 \text{ sec}$$

$$20^\circ\text{C at } 300 \text{ sec}$$

$$\Delta T = 20 - 10 = 10^\circ\text{C}$$

$$\text{Find } T = 24.9^\circ\text{C} \quad \Delta T_c = 24.9 - 10 = 14.9^\circ\text{C}$$

$$10^\circ\text{C to } 300 \text{ sec}$$

$$14.9^\circ\text{C to } x$$

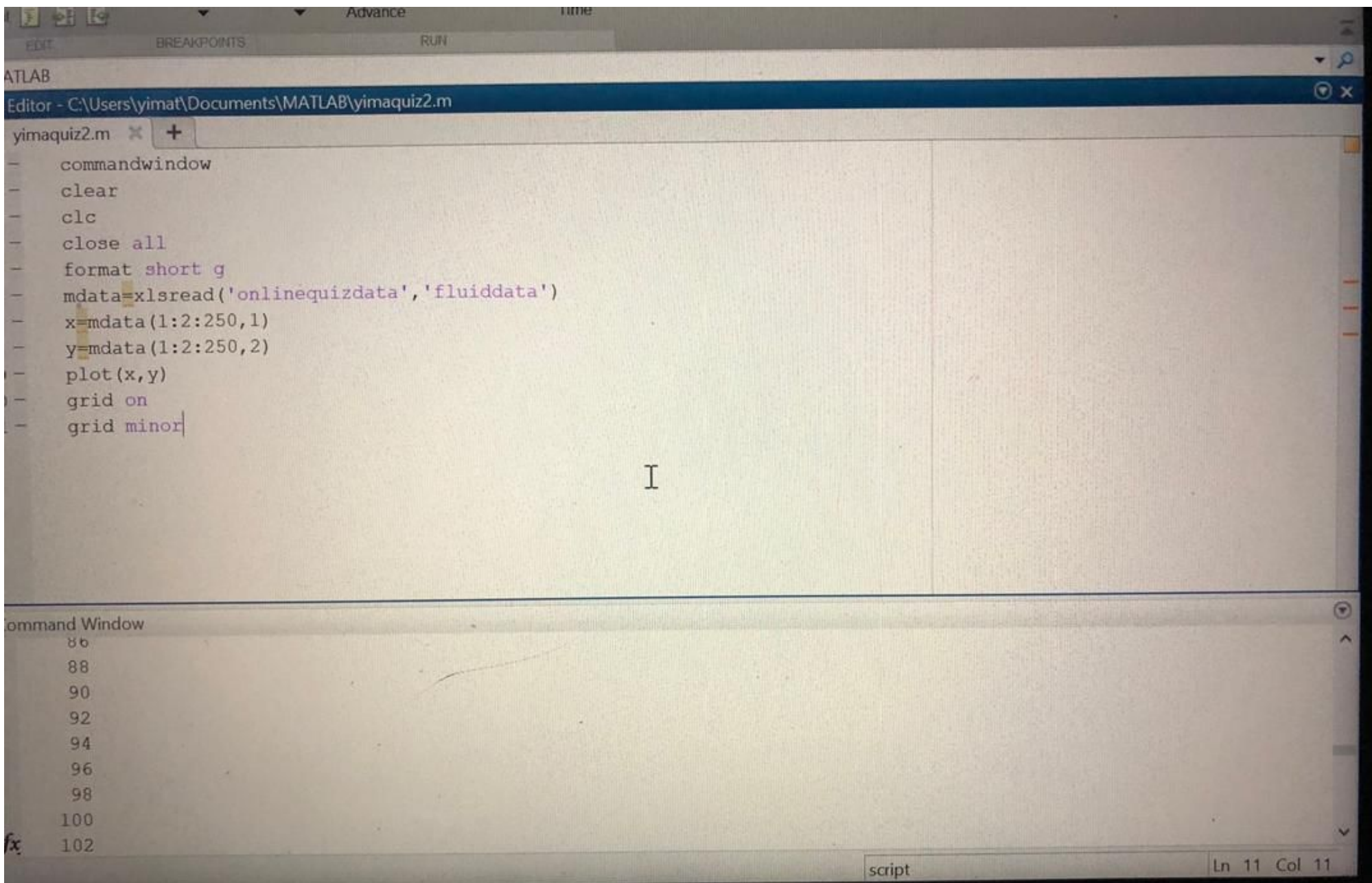
$$10x \text{ to } 300 \times 14.9$$

$$10x = 4470$$

$$x = 447$$

$$x = 447 \text{ seconds}$$

$$x = 7 \text{ minutes } 27 \text{ seconds}$$



fx

script

Ln 11 Col 11

