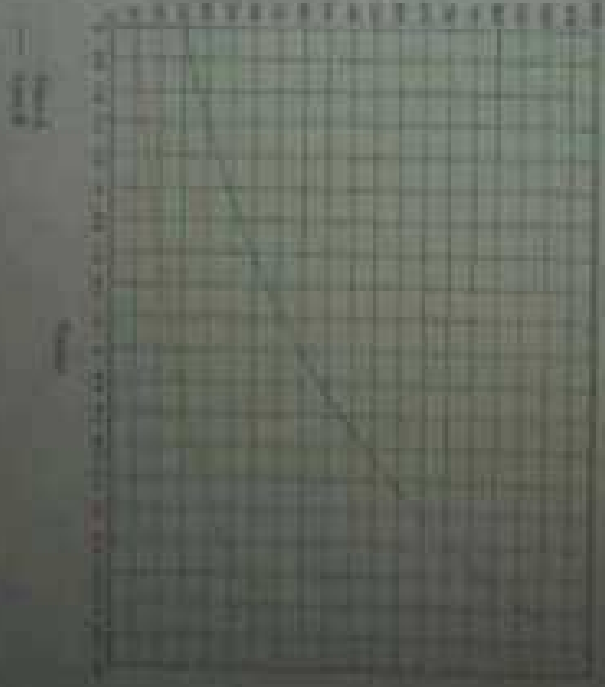


10	100
20	200
30	300
40	400
50	500
60	600
70	700
80	800
90	900
100	1000

10	100
20	200
30	300
40	400
50	500
60	600
70	700
80	800
90	900
100	1000

6. Graph the following

7. Graph the following



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$$1. y = 10e^{kt}$$

$$y = 50 = 10e^{3a}$$

$$(i) 10 = e^{kt} = 5 \text{ at } t = 1$$

$$(ii) 10 = e^{kt} = 1 \text{ at } t = 2$$

$$a: 10 = 50 \text{ --- (i)}$$

$$b: 10 = 150 \text{ --- (ii)}$$

$$50 = 50e^{kt} \text{ --- (iii)}$$

$$y = 150e^{kt} \text{ --- (iv)}$$

$$\ln 5 = kt$$

$$\ln 5 = 2k$$

$$k = \frac{\ln 5}{2} = 0.125$$

$$y = e^{kt}$$

$$\ln y = kt$$

$$\ln 7/5 = kt$$

$$k = 0.125, y = 50e^{0.125t}$$

$$\therefore y = 150e^{0.125t}$$