Assignment 8

Question 3

t values	t.d	R	rate
7.30	0.3125	18	6480
7.45	0.322917	23	8280
8	$0.\overline{333}$	14	5040
8.15	0.34375	24	8640
8.45	0.364583	20	7200
9.15	0.385417	9	3240

a) $$I = \frac{(0.34375 - 0.3125)(6480 + 3(8280 + 5040) + 8280)}{8} + \frac{(0.385417 - 0.34375)(8280 + 4(7200) + 3240)}{6}$$

$$I = \frac{(0.03125)(54720)}{8} + \frac{(0.041667)(40320)}{6}$$

$$I = 213.75 + 280.00224$$

$$I = 493.75224$$

b) $$\frac{493.75224}{105}$$

$$= 4.7024 \text{ cars/min}$$