Lenin Valencia

10

(a) Latinos = L

Others = R

Ratio

$$\frac{L}{R} = \frac{105,342}{98,642 + 62,346 + 436,756 + 32,654} = \frac{105,342}{630,398} = \frac{52671}{315199}$$

$$\frac{L}{R} : \frac{105342}{630398} \rightarrow \frac{L}{R} : \frac{52671}{315199}$$

$$\text{Proportion} = \frac{L}{L+R} = \frac{105342}{735740}$$

$$\text{Percentage} = (105342 \div 735740) \times 100 = 14.32\%$$

(b) Independent = I = 221

Republicans = R = 312

Democrats = D = 432

Ratio $\frac{I}{R} : \frac{221}{312}$

Proportion $\frac{I}{I+R} = \frac{221}{533}$

Percentage $(221 \div 533) \times 100 = 41.46\%$

Lenin Valencia

(c)

Ratio $\frac{R}{D} : \frac{312}{432} : \frac{13}{18}$

Proportion $\frac{R}{R+D} = \frac{312}{744} \quad \frac{13}{31}$

Percentage $\left(\frac{13}{31}\right) \times 100 = 41.94\%$

(11) $L_t = 100,322 \Rightarrow$ Percentual change : P_{CH}

$L_t = 105\,342$

$L_{t+1} = 100\,322$

$\Rightarrow P_{CH} = \frac{L_t - L_{t+1}}{L_t} \times 100\%$

$P_{CH} = \frac{100\,322 - 105\,342}{105\,342} \times 100\%$

$P_{CH} = -4.76\%$

Lenin Valencia

(12) Percentage Change of Latinos. : P_{CHL}

- We have Proportion(1) from exercise 10

$$P_1 = \frac{105\,342}{735\,740} = 0.1432$$

- New proportion of All others remain constant.

$$P_2 = \frac{100,322}{730\,720} = 0.1373$$

$$P_{CHL} = \left(\frac{P_2 - P_1}{P_1}\right) * 100\% = \left(\frac{0.1373 - 0.1432}{0.1432}\right) \times 100\%$$

$$= -4.12\%$$

(13) Voter turnout → P_{CH} from 1996 to 2000

$$P_{CH} = \left(\frac{62 - 56}{56}\right) \times 100\% = 10.71\%$$

(14) 18 : 12 → 3 : 2