

10/12/99

$$\pi R^2$$

$$0-30 \text{ miles} \Rightarrow \pi 30^2 = 2827 \text{ miles}^2$$

$$\frac{1000 \text{ persons}}{\text{mile}^2} \cdot 2827 \text{ miles}^2 = 2.827 \times 10^6 \text{ persons}$$

$$30-50 \text{ miles} \Rightarrow \pi (50^2 - 30^2) = 5026 \text{ miles}^2$$

$$\frac{280 \text{ persons}}{\text{miles}^2} \cdot 5026 \text{ miles}^2 = 1.407 \times 10^6 \text{ persons}$$

$$10 \times 10^6 \text{ persons}$$

$$\text{Average to 50} \Rightarrow \frac{2.827 \times 10^6 + 1.407 \times 10^6 + 10 \times 10^6}{\pi (50^2)}$$

$$= 1812 \text{ persons/mile}^2$$

$$30-50 \quad \frac{1.147 \times 10^7 \text{ persons}}{5026 \text{ miles}^2} = 2282 \text{ persons/miles}^2$$

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