

Algebra II	
pg 394	
1) 99 million	9) 1.090 kg/m ³
2) 186 million	10) 0.8906 kg/m ³
3) 198 million	11) 1.179 kg/m ³
4) 217 million	12) 1.188 kg/m ³
5) 1916 or 1915	13) 216 m
6) 1925	14) 1775 m
7) 1957 or 1956	15) 2070 m
8) 1977	16) 2781 m

11)

$$\begin{array}{r} 0 \\ 400 \\ 500 \end{array} \quad \begin{array}{r} 1.225 \\ ? \\ 1.167 \end{array} \cdot x \quad 0.058$$

$$\left(\frac{400}{500} = \frac{x}{0.058} \right) \cdot 0.058$$

$$x = .0464$$

$$\begin{array}{r} 1.2250 \\ - 0.0464 \\ \hline 1.1786 \end{array}$$

12)

$$\begin{array}{r} 0 \\ 320 \\ 500 \end{array} \quad \begin{array}{r} 1.225 \\ ? \\ 1.167 \end{array} \cdot x \quad 0.058$$

$$\left(\frac{320}{500} = \frac{x}{0.058} \right) \cdot 0.058$$

$$x = 0.03712$$

$$\begin{array}{r} 1.225 \\ - 0.03712 \\ \hline 1.18788 \text{ kg/m}^3 \end{array}$$

14)

$$\begin{array}{r} 1500 \\ x \\ 2000 \end{array} \quad \begin{array}{r} 1.058 \\ 1.030 \\ 1.007 \end{array} \cdot 0.028 \quad 0.051$$

$$\left(\frac{x}{500} = \frac{0.028}{0.051} \right) \cdot 500$$

$$x = 274.5$$

$$1500 + 274.5$$

$$\boxed{1774.5 \text{ m}}$$