III.

13. a) $\dfrac{40}{100} \cdot \text{rest} = 72 \quad \Leftrightarrow \quad \text{rest} = 180\,\text{km}$. $\dfrac{3}{4} \cdot \text{lungime} = 180 \Leftrightarrow \text{lungime} = 240\,\text{km}$.

b) primul an: $\dfrac{1}{4} \cdot 2800 = 700$ milioane euro; au mai rămas 2100 milioane euro.

al doilea an $\dfrac{60}{100} \cdot 2100 = 1260$ milioane euro.

În total s-au încasat $700 + 1260 = 1960$ milioane euro.

14. a) $A(-3;4)$

b) $\begin{cases} f(0) = 0 \\ f(2) = 4 \end{cases} \Leftrightarrow \begin{cases} b = 0 \\ 2a + b = 4 \end{cases} \Leftrightarrow \begin{cases} b = 0 \\ a = 2 \end{cases}.$

c) $A_{COB} = \dfrac{OB \cdot d(C;OB)}{2} = 6 \Leftrightarrow d(C;OB) = \dfrac{6\sqrt{5}}{5}$.

15. b) $V = \dfrac{12^2 \cdot 6}{3} = 288 \text{ cm}^3$.

c) $\left.\begin{array}{l} MO // SC \\ SC \subset (SEC) \end{array}\right\} \Rightarrow MO // (SEC).$

d) Construim $ON \perp SC$, $N \in SC$

$\left.\begin{array}{l} AO \perp SO \\ AO \perp OC \end{array}\right\} \Rightarrow \left.\begin{array}{l} AO \perp (SEC) \\ ON \perp SC \\ ON,\ SC \subset (SEC) \end{array}\right\} \overset{T.3p.}{\Rightarrow} AN \perp SC \Rightarrow m\left((SEC),\overset{\wedge}{(SAC)} \right) = m\left(O\hat{N}A \right)$

$\Rightarrow m\left(O\hat{N}A \right) = 60°.$