α) Είναι:

$$\alpha_{10} - \alpha_6 = 24 \Leftrightarrow$$

$$\Leftrightarrow \alpha_1 + (10-1)\omega - [\alpha_1 + (6-1)\omega] = 24 \Leftrightarrow$$

$$\Leftrightarrow \alpha_1 + 9\omega - \alpha_1 - 5\omega = 24 \Leftrightarrow$$

$$\Leftrightarrow 4\omega = 24 \Leftrightarrow \omega = 6$$

β) Έχουμε:

$$\alpha_{20} = \alpha_1 + (20-1)\omega = 19 + 19 \cdot 6 = 19 + 114 = 133$$

γ) Ισχύει ότι:

$$S_{20} = \frac{20}{2}(\alpha_1 + \alpha_{20}) = 10(19 + 133) = 10 \cdot 152 = 1.520$$