

② Αν $a_6 = 12$ ή $a_{10} = 16$ να βρεθεί a_1 ή w (τις αριθμητικές Προόδους)

ΛΥΣΗ

$$a_v = a_1 + (v-1)w$$

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$$12 = a_1 + (6-1)w$$

$$16 = a_1 + (10-1)w$$

$$\textcircled{1} \quad \boxed{12 = a_1 + 5w}$$

$$\textcircled{2} \quad \boxed{16 = a_1 + 9w}$$

$$\begin{cases} a_1 + 5w = 12 \\ a_1 + 9w = 16 \end{cases} \quad \begin{array}{l} // \quad (-1) \\ // \quad + \end{array} \quad \begin{array}{l} -a_1 - 5w = -12 \\ a_1 + 9w = 16 \\ \hline 4w = 4 \end{array}$$

$$w = 1$$

Αρα $a_1 + 5 \cdot 1 = 12$
 $a_1 = 7.$