

87
(305)

$$\begin{cases} a_1 + a_2 + a_3 + a_4 + a_5 = 93 \\ a_2 + a_4 = 30 \end{cases}$$

$$\begin{cases} a_1 + a_3 + a_5 = 63 \\ a_2 + a_4 = 30 \end{cases}$$

$$\begin{cases} a_1(1 + q^2 + q^4) = 63 \\ a_1 q(1 + q^2) = 30 \end{cases}$$

$$\frac{1 + q^2 + q^4}{q(1 + q^2)} = \frac{21}{10}$$

$$\frac{1}{q} + \frac{q^4}{q(1 + q^2)} = \frac{21}{10}$$

$$\frac{1}{q} + \frac{q^3}{1 + q^2} = \frac{21}{10}$$

$$\frac{1}{q} + q - \frac{q}{q^2 + 1} = \frac{21}{10}$$

$$\frac{1 + q^2}{q} - \frac{q}{q^2 + 1} = \frac{21}{10}$$

$$A - \frac{1}{A} = \frac{21}{10}$$

$$10A^2 - 21A - 10 = 0$$

$$A = 2\frac{1}{2} \quad A = -\frac{2}{5}$$

$$\frac{1 + q^2}{q} = \frac{5}{2}$$

$$2q^2 - 5q + 2 = 0$$

$$q = 2$$

$$q = \frac{1}{2}$$

$$\frac{1 + q^2}{q} = -\frac{2}{5}$$

$$5q^2 + 2q - 5 = 0$$

$\Delta < 0$

\emptyset

$$a_1 q(1 + q^2) = 30 \quad \text{akademi 2013}$$

$$q = 2 \leftarrow$$

$$a_1 \cdot 10 = 30$$

$$a_1 = 3$$

3, 6, 12, 24, 48

$$q = \frac{1}{2}$$

$$a_1 \cdot \frac{5}{2} = 30$$

$$a_1 = 48$$

48, 24, 12, 6, 3