

42
(735)

$$4 \quad 4+d \quad 4+2d \quad 18$$

$$(4+2d)^2 = 18(4+d)$$

$$16+16d+4d^2 = 72+18d$$

$$4d^2 - 2d - 56 = 0$$

$$d = -3\frac{1}{2} \quad 4, \frac{1}{2}, -3, 18$$

$$d = 4 \quad 4, 8, 12, 18$$

43
(735)

$$-3 \quad -3+d \quad -3+2d \quad -3+3d \quad 25$$

$$(-3+3d)^2 = 25(-3+2d)$$

$$9d^2 - 18d + 9 = -75 + 50d$$

$$9d^2 - 68d + 84 = 0$$

$$d = 1\frac{5}{9} \quad -3, -1\frac{4}{9}, \frac{1}{9}, 1\frac{6}{9}, 18$$

$$d = 8 \quad -3, 3, 9, 15, 25$$

45
(735)

$$a_1 \cdot \frac{a_1}{a_1+d} \quad a_1 \quad a_1+d \quad a_1+2d \quad a_1+3d$$

$$\begin{cases} 36 = a_1(a_1+3d) \\ 30 = a_1 + a_1+d + a_1+2d + a_1+3d = 4a_1+6d \end{cases} \rightarrow \begin{cases} a_1(a_1+3d) = 36 \\ 2a_1+3d = 15 \end{cases}$$

$$\begin{cases} a_1(a_1+3d) = 36 \\ a_1+3d = 15-a_1 \end{cases} \rightarrow a_1(15-a_1) = 36 \rightarrow$$

$$a_1 = 12, d = -3 \rightarrow 16, 12, 9, 6, 3$$

$$a_1 = 3, d = 3 \rightarrow 1, 5, 3, 6, 9, 12$$

47
(735)

$$a_1 \cdot \frac{a_1}{a_1+d} \quad a_1 \quad a_1+d \quad a_1+2d$$

$$\begin{cases} 39 = \frac{a_1^2}{a_1+d} + a_1 + a_1+d + a_1+2d \\ 21 = \frac{a_1^2}{a_1+d} + a_1 + 2d \end{cases}$$

$$21 = \frac{a_1^2}{a_1+(18-2a_1)} + a_1 + 2(18-2a_1)$$

$$21 = \frac{a_1^2}{18-a_1} + 36 - 3a_1 \quad / 18-a_1$$

$$18 = 2a_1 + d$$

$$d = 18 - 2a_1$$

→
כל המשוואות
כבר ידוע

$$4a_1^2 - 69a_1 + 270 = 0$$

$$a_1 = 11\frac{1}{4}, a_1 = 6$$

<http://heshbonia.com/> כל המשוואות שמורות ל

$$d = -4\frac{1}{2} \quad d = 6$$

$$18\frac{3}{4}, 11\frac{1}{4}, 6.75, 2\frac{1}{4} \quad | \quad 3, 6, 12, 18$$