

$$a_2 + a_4 + a_6 = 18$$

$$a_2 \cdot a_4 \cdot a_6 = 168$$

найти a_1, d

$$a_1 + d + a_1 + 3d + a_1 + 5d = 18$$

$$(a_1 + d)(a_1 + 3d)(a_1 + 5d) = 168$$

$$(a_1; d)(0; 2)(12; -2)$$

$$3a_1 + 9d = 18$$

$$a_1 + 3d = 6$$

$$(6 - 2d)6(6 + 2d) = 168$$

$$36 - 4d^2 = 28$$

$$4d^2 = 8$$

$$d^2 = 2$$

$$d = \pm \sqrt{2}$$

$$a_1 = 6 - 3\sqrt{2}$$

ОТВЕТ (Игорь) $a_1 = 6 - 3\sqrt{2}$ $d = \pm \sqrt{2}$

(в тетради ответы $a_1 = 18$ $d = -4$ $a_1 = -6$ $d = 4$;))

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$$\text{дано } n=10 \quad S(2n)=25 \quad S(2n+1)=10$$

найти a_7

$$25 = S(2n) = (2a_1 + 19d) \cdot 10$$

$$10 = S(2n+1) = (2a_1 + 20d) \cdot 21/2 = (a_1 + 10d) \cdot 21$$

$$5 = (2a_1 + 19d) \cdot 2$$

$$10 = (a_1 + 10d) \cdot 21$$

$$5 = (2a_1 + 19d) \cdot 2$$

$$10 = (a_1 + 10d) \cdot 21$$

$$4a_1 + 38d = 5 \quad | \cdot 21$$

$$21a_1 + 210d = 10 \quad | \cdot 4$$

$$(38 \cdot 21 - 4 \cdot 210)d = 105 - 40$$

$$-42d = 65$$

$$d = 65 / -42$$

$$10 = (a_1 + 10 \cdot 65 / -42) \cdot 21$$

$$10 = 21 \cdot a_1 - 5 \cdot 65$$

$$21 \cdot a_1 = 10 + 5 \cdot 65$$

$$21a_1 = 335$$

$$a_1 = 335 / 21$$

$$a_7 = a_1 + 6d = 2 \cdot 335 / 42 + 6 \cdot 65 / -42 = 280 / 42 = 140 / 21 = 20 / 3$$

(в тетради ответ $a_7 = 8$)

$$s(20) = 25$$

$$s(21) = 10$$

$$s(20) = a_1 + a_2 + \dots + a_{19} + a_{20}$$

$$s(21) = a_1 + a_2 + \dots + a_{19}$$

$$s(21) - s(20) = a_{20} = a_1 + 19d$$