

$$1, 5, 12, 22$$

$$\begin{array}{c} \rightarrow \\ +4 \quad +7 \quad +9 \\ \rightarrow \\ +12 \quad +17 \quad +22 \end{array}$$

$$2a = 3$$

$$a = \frac{3}{2} = 1.5$$

سوال ۱)

۲)

$$\frac{3}{2}n^2 + bn + c$$

$$\frac{3}{2} + b = 1$$

$$b = 1 - \frac{3}{2}$$

$$\frac{1}{2}n^2 - \frac{1}{2}n = \frac{1}{2} \times 1 \dots - (\frac{1}{2} \times 1 \times 0) = 1.5$$

$$b = -\frac{1}{2}$$

$$0, 1, 3, 6, 10, 15, 21, 28, 36, 45, 55, 66, 78, 91, 105, 120, 136, 153, 171, 190, 210, 231, 252, 274, 297, 321, 346, 372, 399, 427, 456, 486, 517, 549, 582, 616, 651, 687, 724, 762, 801, 841, 882, 924, 967, 1011, 1056, 1102, 1149, 1197, 1246, 1296, 1347, 1399, 1452, 1506, 1561, 1617, 1674, 1732, 1791, 1851, 1912, 1974, 2037, 2101, 2166, 2232, 2299, 2367, 2436, 2506, 2577, 2649, 2722, 2796, 2871, 2947, 3024, 3102, 3181, 3261, 3342, 3424, 3507, 3591, 3676, 3762, 3849, 3937, 4026, 4116, 4207, 4299, 4392, 4486, 4581, 4677, 4774, 4872, 4971, 5071, 5172, 5274, 5377, 5481, 5586, 5692, 5799, 5907, 6016, 6126, 6237, 6349, 6462, 6576, 6691, 6807, 6924, 7042, 7161, 7281, 7402, 7524, 7647, 7771, 7896, 8022, 8149, 8277, 8406, 8536, 8667, 8799, 8932, 9066, 9201, 9337, 9474, 9612, 9751, 9891, 10032, 10174, 10317, 10461, 10606, 10752, 10899, 11047, 11196, 11346, 11497, 11649, 11802, 11956, 12111, 12267, 12424, 12582, 12741, 12901, 13062, 13224, 13387, 13551, 13716, 13882, 14049, 14217, 14386, 14556, 14727, 14899, 15072, 15246, 15421, 15597, 15774, 15952, 16131, 16311, 16492, 16674, 16857, 17041, 17226, 17412, 17600, 17789, 17979, 18170, 18362, 18555, 18749, 18944, 19140, 19337, 19535, 19734, 19934, 20135, 20337, 20540, 20744, 20949, 21155, 21362, 21570, 21779, 21989, 22199, 22410, 22622, 22835, 23049, 23264, 23480, 23697, 23915, 24134, 24354, 24575, 24797, 25020, 25244, 25469, 25695, 25922, 26150, 26379, 26609, 26840, 27072, 27305, 27539, 27774, 28010, 28247, 28485, 28724, 28964, 29205, 29447, 29690, 29934, 30179, 30425, 30672, 30920, 31169, 31419, 31670, 31922, 32175, 32429, 32684, 32940, 33197, 33455, 33714, 33974, 34235, 34497, 34760, 35024, 35289, 35555, 35822, 36090, 36359, 36629, 36900, 37172, 37445, 37719, 38000, 38282, 38565, 38849, 39134, 39420, 39707, 39995, 40284, 40574, 40865, 41157, 41450, 41744, 42039, 42335, 42632, 42930, 43229, 43529, 43830, 44132, 44435, 44739, 45044, 45350, 45657, 45965, 46274, 46584, 46895, 47207, 47520, 47834, 48149, 48465, 48782, 49100, 49419, 49739, 50060, 50382, 50705, 51029, 51354, 51680, 52007, 52335, 52664, 52994, 53325, 53657, 53990, 54324, 54659, 55000, 55342, 55685, 56029, 56374, 56720, 57067, 57415, 57764, 58114, 58465, 58817, 59170, 59524, 59879, 60235, 60592, 60950, 61309, 61669, 62030, 62392, 62755, 63119, 63484, 63850, 64217, 64585, 64954, 65324, 65695, 66067, 66440, 66814, 67189, 67565, 67942, 68320, 68699, 69079, 69460, 69842, 70225, 70609, 70994, 71380, 71767, 72155, 72544, 72934, 73325, 73717, 74110, 74504, 74900, 75297, 75695, 76094, 76494, 76895, 77297, 77700, 78104, 78509, 78915, 79322, 79730, 80139, 80549, 80960, 81372, 81785, 82199, 82614, 83030, 83447, 83865, 84284, 84704, 85125, 85547, 85970, 86394, 86819, 87245, 87672, 88100, 88529, 88959, 89390, 89822, 90255, 90689, 91124, 91560, 92000, 92441, 92883, 93326, 93770, 94215, 94661, 95108, 95556, 96005, 96455, 96906, 97358, 97811, 98265, 98720, 99176, 99633, 100091, 100550, 101010, 101471, 101933, 102396, 102860, 103325, 103791, 104258, 104726, 105195, 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352082, 352927, 353773, 354620, 355468, 356317, 357167, 358018, 358870, 359723, 360577, 361432, 362288, 363145, 364003, 364862, 365722, 366583, 367445, 368308, 369172, 370037, 370903, 371770, 372638, 373507, 374377, 375248, 376120, 376993, 377867, 378742, 379618, 380495, 381373, 382252, 383132, 384013, 384895, 385778, 386662, 387547, 388433, 389320, 390208, 391097, 391987, 392878, 393770, 394663, 395557, 396452, 397348, 398245, 399143, 400042, 400942, 401843, 402745, 403648, 404552, 405457, 406363, 407270, 408178, 409087, 409997, 410908, 411820, 412733, 413647, 414562, 415478, 416395, 417313, 418232, 419152, 420073, 420995, 421918, 422842, 423767, 424693, 425620, 426548, 427477, 428407, 429338, 430270, 431203, 432137, 433072, 434008, 434945, 435883, 436822, 437762, 438703, 439645, 440588, 441532, 442477, 443423, 444370, 445318, 446267, 447217, 448168, 449120, 450073, 451027, 451982, 452938, 453895, 454853, 455812, 456772, 457733, 458695, 459658, 460622, 461587, 462553, 463520, 464488, 465457, 466427, 467398, 468370, 469343, 470317, 471292, 472268, 473245, 474223, 475202, 476182, 477163, 478145, 479128, 480112, 481097, 482083, 483070, 484058, 485047, 486037, 487028, 488020, 489013, 490007, 491002, 492000, 492999, 493999, 494999, 495999, 496999, 497999, 498999, 499999, 500999, 501999, 502999, 503999, 504999, 505999, 506999, 507999, 508999, 509999, 510999, 511999, 512999, 513999, 514999, 515999, 516999, 517999, 518999, 519999, 520999, 521999, 522999, 523999, 524999, 525999, 526999, 527999, 528999, 529999, 530999, 531999, 532999, 533999, 534999, 535999, 536999, 537999, 538999, 539999, 540999, 541999, 542999, 543999, 544999, 545999, 546999, 547999, 548999, 549999, 550999, 551999, 552999, 553999, 554999, 555999, 556999, 557999, 558999, 559999, 560999, 561999, 562999, 563999, 564999, 565999, 566999, 567999, 568999, 569999, 570999, 571999, 572999, 573999, 574999, 575999, 576999, 577999, 578999, 579999, 580999, 581999, 582999, 583999, 584999, 585999, 586999, 587999, 588999, 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839999, 840999, 841999, 842999, 843999, 844999, 845999, 846999, 847999, 848999, 849999, 850999, 851999, 852999, 853999, 854999, 855999, 856999, 857999, 858999, 859999, 860999, 861999, 862999, 863999, 864999, 865999, 866999, 867999, 868999, 869999, 870999, 871999, 872999, 873999, 874999, 875999, 876999, 877999, 878999, 879999, 880999, 881999, 882999, 883999, 884999, 885999, 886999, 887999, 888999, 889999, 890999, 891999, 892999, 893999, 894999, 895999, 896999, 897999, 898999, 899999, 900999, 901999, 902999, 903999, 904999, 905999, 906999, 907999, 908999, 909999, 910999, 911999, 912999, 913999, 914999, 915999, 916999, 917999, 918999, 919999, 920999, 921999, 922999, 923999, 924999, 925999, 926999, 927999, 928999, 929999, 930999, 931999, 932999, 933999, 934999, 935999, 936999, 937999, 938999, 939999, 940999, 941999, 942999, 943999, 944999, 945999, 946999, 947999, 948999, 949999, 950999, 951999, 952999, 953999, 954999, 955999, 956999, 957999, 958999, 959999, 960999, 961999, 962999, 963999, 964999, 965999, 966999, 967999, 968999, 969999, 970999, 971999, 972999, 973999, 974999, 975999, 976999, 977999, 978999, 979999, 980999, 981999, 982999, 983999, 984999, 985999, 986999, 987999, 988999, 989999, 990999, 991999, 992999, 993999, 994999, 995999, 996999, 997999, 998999, 999999, 1000999, 1001999, 1002999, 1003999, 1004999, 1005999, 1006999, 1007999, 1008999, 1009999, 1010999, 1011999, 1012999, 1013999, 1014999, 1015999, 1016999, 1017999, 1018999, 1019999, 1020999, 1021999, 1022999, 1023999, 1024999, 1025999, 1026999, 1027999, 1028999, 1029999, 1030999, 1031999, 1032999, 1033999, 1034999, 1035999, 1036999, 10$$

سوال ۱۵

$$-27 - 21 = -48$$

$$-2K + 22 = -48 \rightarrow 2K = 48 + 22$$

$$K = 35$$

سوال ۱۶

$$t_1 - t_v = 12$$

$$t_1 + 9d - t_1 - 4d = 12$$

$$5d = 12 \quad d = 2.4$$

سوال ۱۷

$$t_4 - t_1 = ?$$

$$t_1 + 5d - t_1 = 5 \times 2.4 = 12$$

سوال ۱۸

$$t_r = 7 \quad t_1 + d = 7$$

$$t_8 = 14 \quad t_1 + 7d = 14$$

$$7d = 7 \quad d = 1 \quad t_1 = 3$$

$$b_n = An - a$$

$$t_r = t_1 + 7d \rightarrow 7 + 7 \times 1 = 14 \quad b_n = 3, 11, \dots$$

$$\frac{2}{a}, \frac{9}{b}, \frac{1}{c}, \frac{14}{d}$$

سوال ۱۹

$$\frac{f_{n-2}}{f_{n+2}} < \frac{r}{r}$$

$$An - c < 4n + 9$$

$$7n < 13 \quad n < 4, 5 \quad 1 \leq n \leq 4$$

$$9, 9, 9, 9, \dots$$

$$\frac{9}{+3}, \frac{9}{+3}, \frac{9}{-3}, \frac{9}{-3}$$

$$A = -\frac{3}{2}$$

$$A + B = 4$$

$$t_n = 1/2 a n^2 + v_0 n$$

$$3 \times (-1, 2) + 2 \times (1, 1) = 13$$

کاتب

Subject: _____

Date: _____

$-4, -8, \dots$ $r_a = r$ $c = -4$ 1. d.b
 $\xrightarrow{+r}$ $\xrightarrow{+r}$ $a = 1$
 $\xrightarrow{+r}$ $\xrightarrow{+r}$

$1n^r + bn - 4$ $1 + b - 4 = -4$

$b = -4 + 4 - 1$

$b = -1$

$t_n = n^r - n - 4$

$t_r = r1$ $t_1 + d = r1$ $t_1 = r4$

$t_r = r1$ $t_1 + rd = r1$ $t_n = an + r1$

$rd = 1. d = a$

$n^r - n - 4 = an + r1 \rightarrow n^r - 4n - r4 =$

$(n-4)(n+r)$

$\{a + r1 = 44\}$ $n = 4$ $n = -r$

