

SUBJECT: _____

DATA: _____

NUMBER: _____

حل المسألة في 3 خطوات

الف) $t_n = n^2 - 1$ $\Rightarrow t_1 = 1^2 - 1 = 0$ $\Rightarrow t_2 = 2^2 - 1 = 3$ $\Rightarrow t_3 = 3^2 - 1 = 8$ $\Rightarrow t_4 = 4^2 - 1 = 15$ $\Rightarrow t_5 = 5^2 - 1 = 24$ $\Rightarrow t_6 = 6^2 - 1 = 35$ $\Rightarrow t_7 = 7^2 - 1 = 48$ $\Rightarrow t_8 = 8^2 - 1 = 63$ $\Rightarrow t_9 = 9^2 - 1 = 80$ $\Rightarrow t_{10} = 10^2 - 1 = 99$ $\Rightarrow t_{11} = 11^2 - 1 = 120$ $\Rightarrow t_{12} = 12^2 - 1 = 143$ $\Rightarrow t_{13} = 13^2 - 1 = 168$ $\Rightarrow t_{14} = 14^2 - 1 = 195$ $\Rightarrow t_{15} = 15^2 - 1 = 224$ $\Rightarrow t_{16} = 16^2 - 1 = 255$ $\Rightarrow t_{17} = 17^2 - 1 = 288$ $\Rightarrow t_{18} = 18^2 - 1 = 323$ $\Rightarrow t_{19} = 19^2 - 1 = 360$ $\Rightarrow t_{20} = 20^2 - 1 = 399$ $\Rightarrow t_{21} = 21^2 - 1 = 440$ $\Rightarrow t_{22} = 22^2 - 1 = 483$ $\Rightarrow t_{23} = 23^2 - 1 = 528$ $\Rightarrow t_{24} = 24^2 - 1 = 575$ $\Rightarrow t_{25} = 25^2 - 1 = 624$ $\Rightarrow t_{26} = 26^2 - 1 = 675$ $\Rightarrow t_{27} = 27^2 - 1 = 728$ $\Rightarrow t_{28} = 28^2 - 1 = 783$ $\Rightarrow t_{29} = 29^2 - 1 = 840$ $\Rightarrow t_{30} = 30^2 - 1 = 899$ $\Rightarrow t_{31} = 31^2 - 1 = 960$ $\Rightarrow t_{32} = 32^2 - 1 = 1023$ $\Rightarrow t_{33} = 33^2 - 1 = 1088$ $\Rightarrow t_{34} = 34^2 - 1 = 1155$ $\Rightarrow t_{35} = 35^2 - 1 = 1224$ $\Rightarrow t_{36} = 36^2 - 1 = 1295$ $\Rightarrow t_{37} = 37^2 - 1 = 1368$ $\Rightarrow t_{38} = 38^2 - 1 = 1443$ $\Rightarrow t_{39} = 39^2 - 1 = 1520$ $\Rightarrow t_{40} = 40^2 - 1 = 1599$ $\Rightarrow t_{41} = 41^2 - 1 = 1680$ $\Rightarrow t_{42} = 42^2 - 1 = 1763$ $\Rightarrow t_{43} = 43^2 - 1 = 1848$ $\Rightarrow t_{44} = 44^2 - 1 = 1935$ $\Rightarrow t_{45} = 45^2 - 1 = 2024$ $\Rightarrow t_{46} = 46^2 - 1 = 2115$ $\Rightarrow t_{47} = 47^2 - 1 = 2208$ $\Rightarrow t_{48} = 48^2 - 1 = 2303$ $\Rightarrow t_{49} = 49^2 - 1 = 2400$ $\Rightarrow t_{50} = 50^2 - 1 = 2499$ $\Rightarrow t_{51} = 51^2 - 1 = 2599$ $\Rightarrow t_{52} = 52^2 - 1 = 2700$ $\Rightarrow t_{53} = 53^2 - 1 = 2803$ $\Rightarrow t_{54} = 54^2 - 1 = 2908$ $\Rightarrow t_{55} = 55^2 - 1 = 3015$ $\Rightarrow t_{56} = 56^2 - 1 = 3124$ $\Rightarrow t_{57} = 57^2 - 1 = 3235$ $\Rightarrow t_{58} = 58^2 - 1 = 3348$ $\Rightarrow t_{59} = 59^2 - 1 = 3463$ $\Rightarrow t_{60} = 60^2 - 1 = 3580$ $\Rightarrow t_{61} = 61^2 - 1 = 3699$ $\Rightarrow t_{62} = 62^2 - 1 = 3820$ $\Rightarrow t_{63} = 63^2 - 1 = 3943$ $\Rightarrow t_{64} = 64^2 - 1 = 4068$ $\Rightarrow t_{65} = 65^2 - 1 = 4195$ $\Rightarrow t_{66} = 66^2 - 1 = 4324$ $\Rightarrow t_{67} = 67^2 - 1 = 4455$ $\Rightarrow t_{68} = 68^2 - 1 = 4588$ $\Rightarrow t_{69} = 69^2 - 1 = 4723$ $\Rightarrow t_{70} = 70^2 - 1 = 4860$ $\Rightarrow t_{71} = 71^2 - 1 = 5000$ $\Rightarrow t_{72} = 72^2 - 1 = 5143$ $\Rightarrow t_{73} = 73^2 - 1 = 5288$ $\Rightarrow t_{74} = 74^2 - 1 = 5435$ $\Rightarrow t_{75} = 75^2 - 1 = 5584$ $\Rightarrow t_{76} = 76^2 - 1 = 5735$ $\Rightarrow t_{77} = 77^2 - 1 = 5888$ $\Rightarrow t_{78} = 78^2 - 1 = 6043$ $\Rightarrow t_{79} = 79^2 - 1 = 6200$ $\Rightarrow t_{80} = 80^2 - 1 = 6359$ $\Rightarrow t_{81} = 81^2 - 1 = 6520$ $\Rightarrow t_{82} = 82^2 - 1 = 6683$ $\Rightarrow t_{83} = 83^2 - 1 = 6848$ $\Rightarrow t_{84} = 84^2 - 1 = 7015$ $\Rightarrow t_{85} = 85^2 - 1 = 7184$ $\Rightarrow t_{86} = 86^2 - 1 = 7355$ $\Rightarrow t_{87} = 87^2 - 1 = 7528$ $\Rightarrow t_{88} = 88^2 - 1 = 7703$ $\Rightarrow t_{89} = 89^2 - 1 = 7880$ $\Rightarrow t_{90} = 90^2 - 1 = 8059$ $\Rightarrow t_{91} = 91^2 - 1 = 8240$ $\Rightarrow t_{92} = 92^2 - 1 = 8423$ $\Rightarrow t_{93} = 93^2 - 1 = 8608$ $\Rightarrow t_{94} = 94^2 - 1 = 8795$ $\Rightarrow t_{95} = 95^2 - 1 = 8984$ $\Rightarrow t_{96} = 96^2 - 1 = 9175$ $\Rightarrow t_{97} = 97^2 - 1 = 9368$ $\Rightarrow t_{98} = 98^2 - 1 = 9563$ $\Rightarrow t_{99} = 99^2 - 1 = 9760$ $\Rightarrow t_{100} = 100^2 - 1 = 9959$ $\Rightarrow t_{101} = 101^2 - 1 = 10160$ $\Rightarrow t_{102} = 102^2 - 1 = 10363$ $\Rightarrow t_{103} = 103^2 - 1 = 10568$ $\Rightarrow t_{104} = 104^2 - 1 = 10775$ $\Rightarrow t_{105} = 105^2 - 1 = 10984$ $\Rightarrow t_{106} = 106^2 - 1 = 11195$ $\Rightarrow t_{107} = 107^2 - 1 = 11408$ $\Rightarrow t_{108} = 108^2 - 1 = 11623$ $\Rightarrow t_{109} = 109^2 - 1 = 11840$ $\Rightarrow t_{110} = 110^2 - 1 = 12059$ $\Rightarrow t_{111} = 111^2 - 1 = 12280$ $\Rightarrow t_{112} = 112^2 - 1 = 12503$ $\Rightarrow t_{113} = 113^2 - 1 = 12728$ $\Rightarrow t_{114} = 114^2 - 1 = 12955$ $\Rightarrow t_{115} = 115^2 - 1 = 13184$ $\Rightarrow t_{116} = 116^2 - 1 = 13415$ $\Rightarrow t_{117} = 117^2 - 1 = 13648$ $\Rightarrow t_{118} = 118^2 - 1 = 13883$ $\Rightarrow t_{119} = 119^2 - 1 = 14120$ $\Rightarrow t_{120} = 120^2 - 1 = 14359$ $\Rightarrow t_{121} = 121^2 - 1 = 14600$ $\Rightarrow t_{122} = 122^2 - 1 = 14843$ $\Rightarrow t_{123} = 123^2 - 1 = 15088$ $\Rightarrow t_{124} = 124^2 - 1 = 15335$ $\Rightarrow t_{125} = 125^2 - 1 = 15584$ $\Rightarrow t_{126} = 126^2 - 1 = 15835$ $\Rightarrow t_{127} = 127^2 - 1 = 16088$ $\Rightarrow t_{128} = 128^2 - 1 = 16343$ $\Rightarrow t_{129} = 129^2 - 1 = 16600$ $\Rightarrow t_{130} = 130^2 - 1 = 16859$ $\Rightarrow t_{131} = 131^2 - 1 = 17120$ $\Rightarrow t_{132} = 132^2 - 1 = 17383$ $\Rightarrow t_{133} = 133^2 - 1 = 17648$ $\Rightarrow t_{134} = 134^2 - 1 = 17915$ $\Rightarrow t_{135} = 135^2 - 1 = 18184$ $\Rightarrow t_{136} = 136^2 - 1 = 18455$ $\Rightarrow t_{137} = 137^2 - 1 = 18728$ $\Rightarrow t_{138} = 138^2 - 1 = 19003$ $\Rightarrow t_{139} = 139^2 - 1 = 19280$ $\Rightarrow t_{140} = 140^2 - 1 = 19559$ $\Rightarrow t_{141} = 141^2 - 1 = 19840$ $\Rightarrow t_{142} = 142^2 - 1 = 20123$ $\Rightarrow t_{143} = 143^2 - 1 = 20408$ $\Rightarrow t_{144} = 144^2 - 1 = 20695$ $\Rightarrow t_{145} = 145^2 - 1 = 20984$ $\Rightarrow t_{146} = 146^2 - 1 = 21275$ $\Rightarrow t_{147} = 147^2 - 1 = 21568$ $\Rightarrow t_{148} = 148^2 - 1 = 21863$ $\Rightarrow t_{149} = 149^2 - 1 = 22160$ $\Rightarrow t_{150} = 150^2 - 1 = 22459$ $\Rightarrow t_{151} = 151^2 - 1 = 22760$ $\Rightarrow t_{152} = 152^2 - 1 = 23063$ $\Rightarrow t_{153} = 153^2 - 1 = 23368$ $\Rightarrow t_{154} = 154^2 - 1 = 23675$ $\Rightarrow t_{155} = 155^2 - 1 = 23984$ $\Rightarrow t_{156} = 156^2 - 1 = 24295$ $\Rightarrow t_{157} = 157^2 - 1 = 24608$ $\Rightarrow t_{158} = 158^2 - 1 = 24923$ $\Rightarrow t_{159} = 159^2 - 1 = 25240$ $\Rightarrow t_{160} = 160^2 - 1 = 25559$ $\Rightarrow t_{161} = 161^2 - 1 = 25880$ $\Rightarrow t_{162} = 162^2 - 1 = 26203$ $\Rightarrow t_{163} = 163^2 - 1 = 26528$ $\Rightarrow t_{164} = 164^2 - 1 = 26855$ $\Rightarrow t_{165} = 165^2 - 1 = 27184$ $\Rightarrow t_{166} = 166^2 - 1 = 27515$ $\Rightarrow t_{167} = 167^2 - 1 = 27848$ $\Rightarrow t_{168} = 168^2 - 1 = 28183$ $\Rightarrow t_{169} = 169^2 - 1 = 28520$ $\Rightarrow t_{170} = 170^2 - 1 = 28859$ $\Rightarrow t_{171} = 171^2 - 1 = 29200$ $\Rightarrow t_{172} = 172^2 - 1 = 29543$ $\Rightarrow t_{173} = 173^2 - 1 = 29888$ $\Rightarrow t_{174} = 174^2 - 1 = 30235$ $\Rightarrow t_{175} = 175^2 - 1 = 30584$ $\Rightarrow t_{176} = 176^2 - 1 = 30935$ $\Rightarrow t_{177} = 177^2 - 1 = 31288$ $\Rightarrow t_{178} = 178^2 - 1 = 31643$ $\Rightarrow t_{179} = 179^2 - 1 = 32000$ $\Rightarrow t_{180} = 180^2 - 1 = 32359$ $\Rightarrow t_{181} = 181^2 - 1 = 32720$ $\Rightarrow t_{182} = 182^2 - 1 = 33083$ $\Rightarrow t_{183} = 183^2 - 1 = 33448$ $\Rightarrow t_{184} = 184^2 - 1 = 33815$ $\Rightarrow t_{185} = 185^2 - 1 = 34184$ $\Rightarrow t_{186} = 186^2 - 1 = 34555$ $\Rightarrow t_{187} = 187^2 - 1 = 34928$ $\Rightarrow t_{188} = 188^2 - 1 = 35303$ $\Rightarrow t_{189} = 189^2 - 1 = 35680$ $\Rightarrow t_{190} = 190^2 - 1 = 36059$ $\Rightarrow t_{191} = 191^2 - 1 = 36440$ $\Rightarrow t_{192} = 192^2 - 1 = 36823$ $\Rightarrow t_{193} = 193^2 - 1 = 37208$ $\Rightarrow t_{194} = 194^2 - 1 = 37595$ $\Rightarrow t_{195} = 195^2 - 1 = 37984$ $\Rightarrow t_{196} = 196^2 - 1 = 38375$ $\Rightarrow t_{197} = 197^2 - 1 = 38768$ $\Rightarrow t_{198} = 198^2 - 1 = 39163$ $\Rightarrow t_{199} = 199^2 - 1 = 39560$ $\Rightarrow t_{200} = 200^2 - 1 = 39959$ $\Rightarrow t_{201} = 201^2 - 1 = 40360$ $\Rightarrow t_{202} = 202^2 - 1 = 40763$ $\Rightarrow t_{203} = 203^2 - 1 = 41168$ $\Rightarrow t_{204} = 204^2 - 1 = 41575$ $\Rightarrow t_{205} = 205^2 - 1 = 41984$ $\Rightarrow t_{206} = 206^2 - 1 = 42395$ $\Rightarrow t_{207} = 207^2 - 1 = 42808$ $\Rightarrow t_{208} = 208^2 - 1 = 43223$ $\Rightarrow t_{209} = 209^2 - 1 = 43640$ $\Rightarrow t_{210} = 210^2 - 1 = 44059$ $\Rightarrow t_{211} = 211^2 - 1 = 44480$ $\Rightarrow t_{212} = 212^2 - 1 = 44903$ $\Rightarrow t_{213} = 213^2 - 1 = 45328$ $\Rightarrow t_{214} = 214^2 - 1 = 45755$ $\Rightarrow t_{215} = 215^2 - 1 = 46184$ $\Rightarrow t_{216} = 216^2 - 1 = 46615$ $\Rightarrow t_{217} = 217^2 - 1 = 47048$ $\Rightarrow t_{218} = 218^2 - 1 = 47483$ $\Rightarrow t_{219} = 219^2 - 1 = 47920$ $\Rightarrow t_{220} = 220^2 - 1 = 48359$ $\Rightarrow t_{221} = 221^2 - 1 = 48800$ $\Rightarrow t_{222} = 222^2 - 1 = 49243$ $\Rightarrow t_{223} = 223^2 - 1 = 49688$ $\Rightarrow t_{224} = 224^2 - 1 = 50135$ $\Rightarrow t_{225} = 225^2 - 1 = 50584$ $\Rightarrow t_{226} = 226^2 - 1 = 51035$ $\Rightarrow t_{227} = 227^2 - 1 = 51488$ $\Rightarrow t_{228} = 228^2 - 1 = 51943$ $\Rightarrow t_{229} = 229^2 - 1 = 52400$ $\Rightarrow t_{230} = 230^2 - 1 = 52859$ $\Rightarrow t_{231} = 231^2 - 1 = 53320$ $\Rightarrow t_{232} = 232^2 - 1 = 53783$ $\Rightarrow t_{233} = 233^2 - 1 = 54248$ $\Rightarrow t_{234} = 234^2 - 1 = 54715$ $\Rightarrow t_{235} = 235^2 - 1 = 55184$ $\Rightarrow t_{236} = 236^2 - 1 = 55655$ $\Rightarrow t_{237} = 237^2 - 1 = 56128$ $\Rightarrow t_{238} = 238^2 - 1 = 56603$ $\Rightarrow t_{239} = 239^2 - 1 = 57080$ $\Rightarrow t_{240} = 240^2 - 1 = 57559$ $\Rightarrow t_{241} = 241^2 - 1 = 58040$ $\Rightarrow t_{242} = 242^2 - 1 = 58523$ $\Rightarrow t_{243} = 243^2 - 1 = 59008$ $\Rightarrow t_{244} = 244^2 - 1 = 59495$ $\Rightarrow t_{245} = 245^2 - 1 = 59984$ $\Rightarrow t_{246} = 246^2 - 1 = 60475$ $\Rightarrow t_{247} = 247^2 - 1 = 60968$ $\Rightarrow t_{248} = 248^2 - 1 = 61463$ $\Rightarrow t_{249} = 249^2 - 1 = 61960$ $\Rightarrow t_{250} = 250^2 - 1 = 62459$ $\Rightarrow t_{251} = 251^2 - 1 = 62960$ $\Rightarrow t_{252} = 252^2 - 1 = 63463$ $\Rightarrow t_{253} = 253^2 - 1 = 63968$ $\Rightarrow t_{254} = 254^2 - 1 = 64475$ $\Rightarrow t_{255} = 255^2 - 1 = 64984$ $\Rightarrow t_{256} = 256^2 - 1 = 65495$ $\Rightarrow t_{257} = 257^2 - 1 = 66008$ $\Rightarrow t_{258} = 258^2 - 1 = 66523$ $\Rightarrow t_{259} = 259^2 - 1 = 67040$ $\Rightarrow t_{260} = 260^2 - 1 = 67559$ $\Rightarrow t_{261} = 261^2 - 1 = 68080$ $\Rightarrow t_{262} = 262^2 - 1 = 68603$ $\Rightarrow t_{263} = 263^2 - 1 = 69128$ $\Rightarrow t_{264} = 264^2 - 1 = 69655$ $\Rightarrow t_{265} = 265^2 - 1 = 70184$ $\Rightarrow t_{266} = 266^2 - 1 = 70715$ $\Rightarrow t_{267} = 267^2 - 1 = 71248$ $\Rightarrow t_{268} = 268^2 - 1 = 71783$ $\Rightarrow t_{269} = 269^2 - 1 = 72320$ $\Rightarrow t_{270} = 270^2 - 1 = 72859$ $\Rightarrow t_{271} = 271^2 - 1 = 73400$ $\Rightarrow t_{272} = 272^2 - 1 = 73943$ $\Rightarrow t_{273} = 273^2 - 1 = 74488$ $\Rightarrow t_{274} = 274^2 - 1 = 75035$ $\Rightarrow t_{275} = 275^2 - 1 = 75584$ $\Rightarrow t_{276} = 276^2 - 1 = 76135$ $\Rightarrow t_{277} = 277^2 - 1 = 76688$ $\Rightarrow t_{278} = 278^2 - 1 = 77243$ $\Rightarrow t_{279} = 279^2 - 1 = 77800$ $\Rightarrow t_{280} = 280^2 - 1 = 78359$ $\Rightarrow t_{281} = 281^2 - 1 = 78920$ $\Rightarrow t_{282} = 282^2 - 1 = 79483$ $\Rightarrow t_{283} = 283^2 - 1 = 80048$ $\Rightarrow t_{284} = 284^2 - 1 = 80615$ $\Rightarrow t_{285} = 285^2 - 1 = 81184$ $\Rightarrow t_{286} = 286^2 - 1 = 81755$ $\Rightarrow t_{287} = 287^2 - 1 = 82328$ $\Rightarrow t_{288} = 288^2 - 1 = 82903$ $\Rightarrow t_{289} = 289^2 - 1 = 83480$ $\Rightarrow t_{290} = 290^2 - 1 = 84059$ $\Rightarrow t_{291} = 291^2 - 1 = 84640$ $\Rightarrow t_{292} = 292^2 - 1 = 85223$ $\Rightarrow t_{293} = 293^2 - 1 = 85808$ $\Rightarrow t_{294} = 294^2 - 1 = 86395$ $\Rightarrow t_{295} = 295^2 - 1 = 86984$ $\Rightarrow t_{296} = 296^2 - 1 = 87575$ $\Rightarrow t_{297} = 297^2 - 1 = 88168$ $\Rightarrow t_{298} = 298^2 - 1 = 88763$ $\Rightarrow t_{299} = 299^2 - 1 = 89360$ $\Rightarrow t_{300} = 300^2 - 1 = 89959$ $\Rightarrow t_{301} = 301^2 - 1 = 90560$ $\Rightarrow t_{302} = 302^2 - 1 = 91163$ $\Rightarrow t_{303} = 303^2 - 1 = 91768$ $\Rightarrow t_{304} = 304^2 - 1 = 92375$ $\Rightarrow t_{305} = 305^2 - 1 = 92984$ $\Rightarrow t_{306} = 306^2 - 1 = 93595$ $\Rightarrow t_{307} = 307^2 - 1 = 94208$ $\Rightarrow t_{308} = 308^2 - 1 = 94823$ $\Rightarrow t_{309} = 309^2 - 1 = 95440$ $\Rightarrow t_{310} = 310^2 - 1 = 96059$ $\Rightarrow t_{311} = 311^2 - 1 = 96680$ $\Rightarrow t_{312} = 312^2 - 1 = 97303$ $\Rightarrow t_{313} = 313^2 - 1 = 97928$ $\Rightarrow t_{314} = 314^2 - 1 = 98555$ $\Rightarrow t_{315} = 315^2 - 1 = 99184$ $\Rightarrow t_{316} = 316^2 - 1 = 99815$ $\Rightarrow t_{317} = 317^2 - 1 = 100448$ $\Rightarrow t_{318} = 318^2 - 1 = 101083$ $\Rightarrow t_{319} = 319^2 - 1 = 101720$ $\Rightarrow t_{320} = 320^2 - 1 = 102359$ $\Rightarrow t_{321} = 321^2 - 1 = 102960$ $\Rightarrow t_{322} = 322^2 - 1 = 103563$ $\Rightarrow t_{323} = 323^2 - 1 = 104168$ $\Rightarrow t_{324} = 324^2 - 1 = 104775$ $\Rightarrow t_{325} = 325^2 - 1 = 105384$ $\Rightarrow t_{326} = 326^2 - 1 = 105995$ $\Rightarrow t_{327} = 327^2 - 1 = 106608$ $\Rightarrow t_{328} = 328^2 - 1 = 107223$ $\Rightarrow t_{329} = 329^2 - 1 = 107840$ $\Rightarrow t_{330} = 330^2 - 1 = 108459$ $\Rightarrow t_{331} = 331^2 - 1 = 109080$ $\Rightarrow t_{332} = 332^2 - 1 = 109703$ $\Rightarrow t_{333} = 333^2 - 1 = 110328$ $\Rightarrow t_{334} = 334^2 - 1 = 110955$ $\Rightarrow t_{335} = 335^2 - 1 = 111584$ $\Rightarrow t_{336} = 336^2 - 1 = 112215$ $\Rightarrow t_{337} = 337^2 - 1 = 112848$ $\Rightarrow t_{338} = 338^2 - 1 = 113483$ $\Rightarrow t_{339} = 339^2 - 1 = 114120$ $\Rightarrow t_{340} = 340^2 - 1 = 114759$ $\Rightarrow t_{341} = 341^2 - 1 = 115400$ $\Rightarrow t_{342} = 342^2 - 1 = 116043$ $\Rightarrow t_{343} = 343^2 - 1 = 116688$ $\Rightarrow t_{344} = 344^2 - 1 = 117335$ $\Rightarrow t_{345} = 345^2 - 1 = 117984$ $\Rightarrow t_{346} = 346^2 - 1 = 118635$ $\Rightarrow t_{347} = 347^2 - 1 = 119288$ $\Rightarrow t_{348} = 348^2 - 1 = 119943$ $\Rightarrow t_{349} = 349^2 - 1 = 120600$ $\Rightarrow t_{350} = 350^2 - 1 = 121259$ $\Rightarrow t_{351} = 351^2 - 1 = 121920$ $\Rightarrow t_{352} = 352^2 - 1 = 122583$ $\Rightarrow t_{353} = 353^2 - 1 = 123248$ $\Rightarrow t_{354} = 354^2 - 1 = 123915$ $\Rightarrow t_{355} = 355^2 - 1 = 124584$ $\Rightarrow t_{356} = 356^2 - 1 = 125255$ $\Rightarrow t_{357} = 357^2 - 1 = 125928$ $\Rightarrow t_{358} = 358^2 - 1 = 126603$ $\Rightarrow t_{359} = 359^2 - 1 = 127280$ $\Rightarrow t_{360} = 360^2 - 1 = 127959$ $\Rightarrow t_{361} = 361^2 - 1 = 128640$ $\Rightarrow t_{362} = 362^2 - 1 = 129323$ $\Rightarrow t_{363} = 363^2 - 1 = 130008$ $\Rightarrow t_{364} = 364^2 - 1 = 130695$ $\Rightarrow t_{365} = 365^2 - 1 = 131384$ $\Rightarrow t_{366} = 366^2 - 1 = 132075$ $\Rightarrow t_{367} = 367^2 - 1 = 132768$ $\Rightarrow t_{368} = 368^2 - 1 = 133463$ $\Rightarrow t_{369} = 369^2 - 1 = 134160$ $\Rightarrow t_{370} = 370^2 - 1 = 134859$ $\Rightarrow t_{371} = 371^2 - 1 = 135560$ $\Rightarrow t_{372} = 372^2 - 1 = 136263$ $\Rightarrow t_{373} = 373^2 - 1 = 136968$ $\Rightarrow t_{374} = 374^2 - 1 = 137675$ $\Rightarrow t_{375} = 375^2 - 1 = 138384$ $\Rightarrow t_{376} = 376^2 - 1 = 139095$ $\Rightarrow t_{377} = 377^2 - 1 = 139808$ $\Rightarrow t_{378} = 378^2 - 1 = 140523$ $\Rightarrow t_{379} = 379^2 - 1 = 141240$ $\Rightarrow t_{380} = 380^2 - 1 = 141959$ $\Rightarrow t_{381} = 381^2 - 1 = 142680$ $\Rightarrow t_{382} = 382^2 - 1 = 143403$ $\Rightarrow t_{383} = 383^2 - 1 = 144128$ $\Rightarrow t_{384} = 384^2 - 1 = 144855$ $\Rightarrow t_{385} = 385^2 - 1 = 145584$ $\Rightarrow t_{386} = 386^2 - 1 = 146315$ $\Rightarrow t_{387} = 387^2 - 1 = 147048$ $\Rightarrow t_{388} = 388^2 - 1 = 147783$ $\Rightarrow t_{389} = 389^2 - 1 = 148520$ $\Rightarrow t_{390} = 390^2 - 1 = 149259$ $\Rightarrow t_{391} = 391^2 - 1 = 150000$ $\Rightarrow t_{392} = 392^2 - 1 = 150743$ $\Rightarrow t_{393} = 393^2 - 1 = 151488$ $\Rightarrow t_{394} = 394^2 - 1 = 152235$ $\Rightarrow t_{395} = 395^2 - 1 = 152984$ $\Rightarrow t_{396} = 396^2 - 1 = 153735$ $\Rightarrow t_{397} = 397^2 - 1 = 154488$ $\Rightarrow t_{398} = 398^2 - 1 = 155243$ $\Rightarrow t_{399} = 399^2 - 1 = 156000$ $\Rightarrow t_{400} = 400^2 - 1 = 156759$ $\Rightarrow t_{401} = 401^2 - 1 = 157520$ $\Rightarrow t_{402} = 402^2 - 1 = 158283$ $\Rightarrow t_{403} = 403^2 - 1 = 159048$ $\Rightarrow t_{404} = 404^2 - 1 = 159815$ $\Rightarrow t_{405} = 405^2 - 1 = 160584$ $\Rightarrow t_{406} = 406^2 - 1 = 161355$ $\Rightarrow t_{407} = 407^2 - 1 = 162128$ $\Rightarrow t_{408} = 408^2 - 1 = 162903$ $\Rightarrow t_{409} = 409^2 - 1 = 163680$ $\Rightarrow t_{410} = 410^2 - 1 = 164459$ $\Rightarrow t_{411} = 411^2 - 1 = 165240$ $\Rightarrow t_{412} = 412^2 - 1 = 166023$ $\Rightarrow t_{413} = 413^2 - 1 = 166808$ $\Rightarrow t_{414} = 414^2 - 1 = 167595$ $\Rightarrow t_{415} = 415^2 - 1 = 168384$ <

SUBJECT: _____

DATA: _____

NUMBER: _____

الف) $zn = n^2 - 4n + 2 \Rightarrow$ $n_{min} = \frac{-b}{2a} = \frac{4}{2} = 2$ (4)

سليم $\Rightarrow 2^2 - 4(2) + 2 = (-2)$

ب) $zn = n^2 + 4n + 1 \Rightarrow$ $n_{min} = \frac{-b}{2a} = \frac{-4}{2} = -2$

سليم $\Rightarrow (-2)^2 + 4(-2) + 1 = (-3)$

$zn = -\frac{1}{2}, -\frac{1}{2}, -\frac{1}{2}, -\frac{1}{2}, -\frac{1}{2}$ $\Rightarrow$ $2a = 2 \Rightarrow a = 1$
 $2a + b = -2 \Rightarrow 2(1) + b = -2 \Rightarrow b = -4$
 $a + b + c = -2 \Rightarrow 1 - 4 + c = -2 \Rightarrow c = 1$

10

$zn = an^2 + bn + c \Rightarrow n^2 - 4n + 1$

$\Rightarrow z_{10} = 1^2 - 4(1) + 1 = (-2)$

$zn = -4, -1, 1, 2, 1$ $\Rightarrow$ $2a = 2 \Rightarrow a = 1$
 $2a + b = 0 \Rightarrow 2(1) + b = 0 \Rightarrow b = -2$
 $a + b + c = -4 \Rightarrow 1 - 2 + c = -4 \Rightarrow c = -3$

$zn = an^2 + bn + c \Rightarrow 2n^2 - n - 3$
 $\Rightarrow c = -3$

20 $[-\infty, a + \varepsilon], [2a + 1, +\infty)$ اشتراك منتهي (9)

سليم $\Rightarrow a + \varepsilon \leq 2a + 1 \Rightarrow 2 < a$

الف) $1, 2, 3, 4, 5$ $\Rightarrow$ $\frac{1+5}{2} + 1 = 4$ (10)

ب) $1, 2, 3, 4, 5$ $\Rightarrow$ $\frac{1+5}{2} + 1 = 4$ (11)

ج) $1, 2, 3, 4, 5$ $\Rightarrow$ $\frac{1+5}{2} + 1 = 4$ (12)

د) اصل سوال $\Rightarrow n(A \cup B) = n(A) + n(B) - n(A \cap B) = 22 + 19 - 6 = 35$

SHAHAB