

## THE GOLDBACH CONJECTURE

For hundreds of years mathematicians have tried to solve the Goldbach Conjecture by finding the pattern in primes that makes every even number above 4 the sum of 2 primes. But there are so many solutions for high even numbers that the pattern has been right under mathematicians noses all along! It is the prime distribution function shown here for 100 odd numbers.

## PRIME DISTRIBUTION FUNCTION

$$\Pr( n \in \text{SET} ) = 1 / \log(n)$$

## MODIFIED PRIME DISTRIBUTION FUNCTION

$$\Pr( n \in \text{SET} ) = 2 / \log(n) \text{ where } n \text{ is Odd}$$

3 5 7 9 11 13 15 17 19 21 23 29 33 43 49 55 57 63 65 71 75 79 89 91 93 95 97 99  
103 105 107 109 111 113 117 119 121 127 137 143 157 161 173 177 183 189 195  
197 203 211 219 231 235 237 239 243 245 249 251 253 259 265 271 295 297 303  
307 309 313 317 321 325 327 329 333 337 341 351 361 363 367 383 385 387 389  
403 409 421 433 435 437 441 449 451 453 457 471 475 479 491

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$$3+5=8$$

$$3+7=10$$

$$5+5=10$$

$$3+9=12$$

$$5+7=12$$

$$3+11=14$$

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$383+479=862$

$387+475=862$

$409+453=862$

$421+441=862$

$385+479=864$

$389+475=864$

$387+479=866$

$409+457=866$

$433+433=866$

$$389+479=868$$
$$433+435=868$$

$$421+449=870$$
$$433+437=870$$
$$435+435=870$$

$$421+451=872$$
$$435+437=872$$

$$383+491=874$$
$$403+471=874$$
$$421+453=874$$
$$433+441=874$$
$$437+437=874$$

$$385+491=876$$
$$435+441=876$$

$$387+491=878$$
$$403+475=878$$
$$421+457=878$$
$$437+441=878$$

$$389+491=880$$
$$409+471=880$$

$$403+479=882$$
$$433+449=882$$
$$441+441=882$$

$$409+475=884$$
$$433+451=884$$
$$435+449=884$$

$$433+453=886$$
$$435+451=886$$
$$437+449=886$$

$$409+479=888$$
$$435+453=888$$
$$437+451=888$$

$$433+457=890$$

$$437+453=890$$
$$441+449=890$$

$$421+471=892$$
$$435+457=892$$
$$441+451=892$$

$$403+491=894$$
$$437+457=894$$
$$441+453=894$$

$$421+475=896$$

$$441+457=898$$
$$449+449=898$$

$$409+491=900$$
$$421+479=900$$
$$449+451=900$$

$$449+453=902$$
$$451+451=902$$

$$433+471=904$$
$$451+453=904$$

$$435+471=906$$
$$449+457=906$$
$$453+453=906$$

$$433+475=908$$
$$437+471=908$$
$$451+457=908$$

$$435+475=910$$
$$453+457=910$$

$$421+491=912$$
$$433+479=912$$
$$437+475=912$$
$$441+471=912$$

$$435+479=914$$
$$457+457=914$$

$437+479=916$   
 $441+475=916$

$441+479=920$   
 $449+471=920$

$451+471=922$

$433+491=924$   
 $449+475=924$   
 $453+471=924$

$435+491=926$   
 $451+475=926$

$437+491=928$   
 $449+479=928$   
 $453+475=928$   
 $457+471=928$

$451+479=930$

$441+491=932$   
 $453+479=932$   
 $457+475=932$

$457+479=936$

$449+491=940$

$451+491=942$   
 $471+471=942$

$453+491=944$

$471+475=946$

$457+491=948$

$471+479=950$

$$475+475=950$$

$$475+479=954$$

$$479+479=958$$

$$471+491=962$$

$$475+491=966$$

$$479+491=970$$

$$491+491=982$$