

X - required number

A, B - natural number

X < 50 and X - even number

$A^2 < X < B^3$

Solve:

We can't take number in a square more than 3, because $4^3=64$ (this number is more than 50)

Therefore:

$3^3=27$

We select numbers in a square:

$1^2=1$ – there are a lot of numbers which fit conditions, but it is necessary to us to pick one number.
Therefore this particular number doesn't approach very well

$2^2=4$ - there are a lot of numbers which fit conditions, but it is necessary to us to pick one number.
Therefore this particular number doesn't approach very well

$3^2=9$ - there are a lot of numbers which fit conditions, but it is necessary to us to pick one number.
Therefore this particular number doesn't approach very well

$4^2=16$ - there are a lot of numbers which fit conditions, but it is necessary to us to pick one number.
Therefore this particular number doesn't approach very well

$5^2=25$ –Only one number suits conditions, it means that is a required number = 26

Test:

$26 > 5^2$ and $26 < 3^3$

26 is an even number

$26 < 50$

No other numbers are more suitable than 26

All conditions are satisfied

Answer: 26