

Re: Can you help me and Solve the equation ???

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- *From:* Robert Israel <israel@xx>
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The Qurqirish Dragon <qurqirishd@xxxxxxx> writes:

On May 16, 7:06 am, math_ali <math_...@xxxxxxxxx> wrote:

If I have that equation
 $A=D^2$
and A must be positive integer
what is the probable value of D ???

Since you say the "probable" value of D, I am guessing that this is a probability problem. That said, we need a probability distribution on A to determine anything about D, other than the obvious (that D is the positive or negative square-root of a positive integer). If A is chosen uniformly at random from the positive integers, then all possible values of D are equally likely (and the probability is infinitesimal).

There is no such thing as "uniformly at random from the positive integers".

If, for example, we say A is chosen by rolling two standard 6-sided dice, then there are 22 possible values for D, with the positive and negative square roots of 7 being most likely, at 1/12 each.

Why should the positive and negative square roots be equally likely?

If you are looking for the expected value of D, then it is 0 (regardless of the distribution of A). See if you can figure out why. (one-word hint: symmetry)

Nonsense. It could be anywhere from $+\sqrt{E[A]}$ to $-\sqrt{E[A]}$.
The probability distribution of D is not determined by the probability

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distribution of A.

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