



Puzzle: 21 questions game

TOTAL POINTS 4

1. Find an unknown integer $1 \leq x \leq 3$ by asking 2 questions "Is $x = y$?" (for any $1 \leq y \leq 3$). When you ask such a question, simply enter "y" instead of "Is $x=y$?" Your opponent will reply either "Yes", or " $x < y$ ", or " $x > y$,"
- 1 point

There are no questions left.

x is larger than 2

Congratulations! x is equal to 3

Ask

Reset

2. Find an unknown integer $1 \leq x \leq 15$ by asking 4 questions "Is $x = y$?" (for any $1 \leq y \leq 15$). When you ask such a question, simply enter "y" instead of "Is $x=y$?" Your opponent will reply either "Yes", or " $x < y$ ", or " $x > y$,"
- 1 point

There are no questions left.

x is larger than 8

x is larger than 12

x is smaller than 14

Congratulations! x is equal to 13

Ask

Reset

3. Find an unknown integer $1 \leq x \leq 127$ by asking 7 questions "Is $x = y$?" (for any $1 \leq y \leq N$). When you ask such a question, simply enter "y" instead of "Is $x=y$?" Your opponent will reply either "Yes", or " $x < y$ ", or " $x > y$,"
- 1 point

There are no questions left.

x is larger than 64

x is smaller than 96

x is larger than 80

x is smaller than 88

x is smaller than 84

x is larger than 82

Congratulations! x is equal to 83

Ask

Reset

4. Find an unknown integer $1 \leq x \leq 2097151$ by asking 21 questions "Is $x = y$?" (for any $1 \leq y \leq 2097151$). When you ask such a question, simply enter "y" instead of "Is $x=y$?" Your opponent will reply either "Yes", or " $x < y$ ", or " $x > y$,"
- 1 point

of "Is $x=y$?" Your opponent will reply either "Yes", or " $x < y$ ", or " $x > y$."

There are 21 questions left.

History is empty. Make your prediction.

Ask

Reset



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