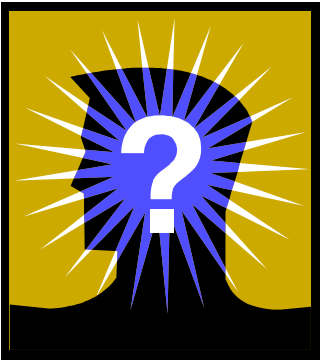


# ROUND #2

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For a given  $n$ -sided regular polygon with  $n$  4

## ROUND #3

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A cube  $21 \times 21 \times 21$ , made of light-colored wood, is painted black on all sides. Then it is cut into small cubes  $1 \times 1 \times 1$  each. How many small cubes have at least one side painted black?



# ROUND #4

# **ROUND #5**

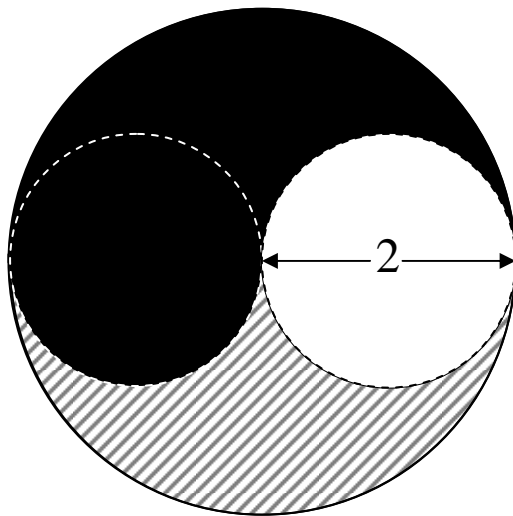
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# ROUND #7

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What is the ratio of the area of the white circle to the shaded area at the bottom of the circle?









# **ROUND #10**

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Sarah and Sam are standing back to back. They each walk 10 feet straight ahead.