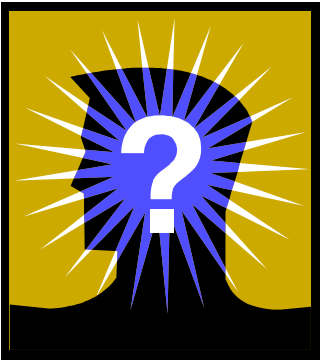


ROUND #2

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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

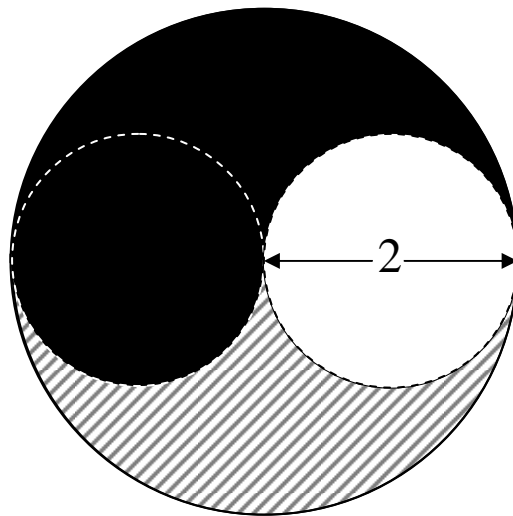
ROUND #5

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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.