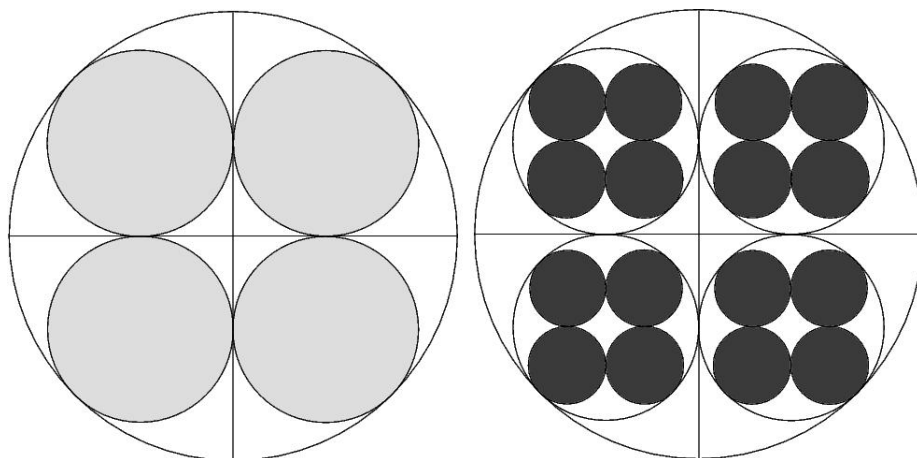


puzzles

The EIGHTEENTH
Sean Kelly
Brandon McPhail



Sixteen Fourths The figure at left was created by inscribing four congruent circles in the larger circle such that any two circles touch in at most one point. The figure at right was created by repeating the process on each of the four inner circles.

What is the ratio of the light gray area to the dark gray area?

Even Aristotle could do this.

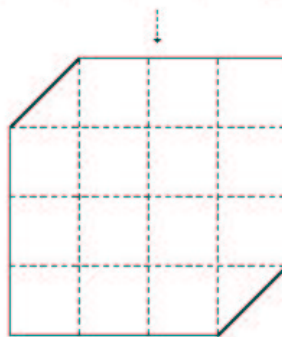
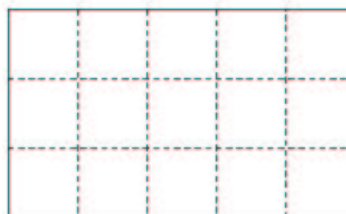
Rectangle Dissection

Any two polygons with the same area can be dissected into one another by dividing them into subpolygons. You can probably figure out how to dissect a 3x5 rectangle and reassemble it into the shape on the right (a 4x4 square with two corners missing). The challenge here is to do this using the least number of pieces possible.

Can you cut the rectangle up and glue it together into the shape on the right?

Thanks goes out to Martin Deraux for this puzzle. Check out his page, <http://www.math.utah.edu/~deraux/> for some more interesting puzzles.

Even Kant could do this.



So what if Freud can do it??

Even Freud could do this.

Even Pythagoras could do this.

Even Aristotle could do this.

Even Kant could do this.

Even Ray Mayer could do this.

Easy

Not easy

More challenging

This is a hard problem.

Go ask him for help.

Think you know the answer?

For more info on these puzzles, go to

<http://www.reed.edu/~mcphailb/quest/>

Place your last
farewell or
digital epitaph at
mylastemail.com

Questions? Blitz: puzzles@reed.edu