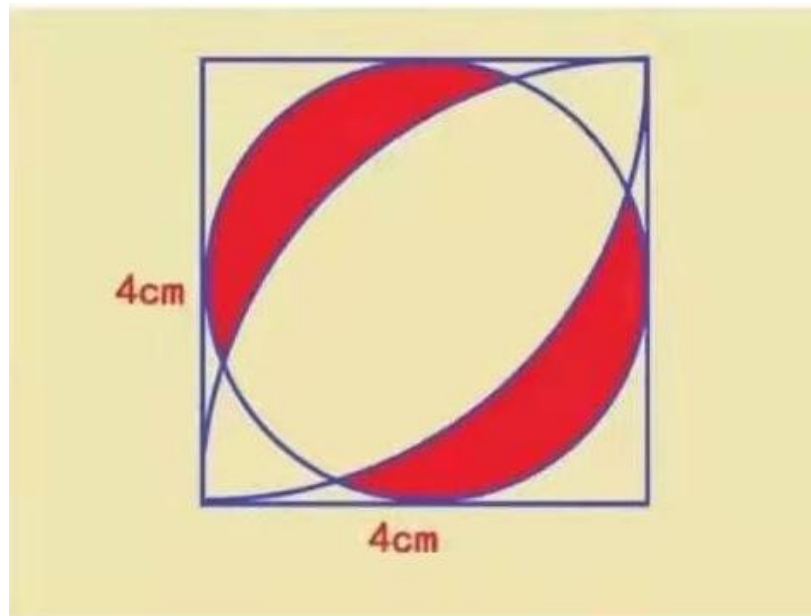# UC Merced Applied Math Problem of the Month
September 17 – October 13, 2021

What is the area of the regions in red?

- Any method, analytical or numerical, can be used, including but not limited to algebra, geometry, calculus, differential equations, linear algebra, probability, statistics, computer simulations, experiment, etc.
- All solutions need to include detailed reasoning and explanations.
- Partial solutions are welcome!
- A well-documented failed approach with a clear explanation of why the method does not work will be valued as much as a complete solution!

- Send in what you have accomplished to
  https://ucmerced.app.box.com/f/ee22d8579d7241068e17f9d4c458b25e
  before Wednesday, October 13, at 5pm.

- Any undergraduate students who submitted top and/or creative solutions will be recognized on the Applied Mathematics Department website. They will be entered into a drawing for an Amazon gift card of $50.
- All undergraduate students who have submitted solutions will be entered into a second drawing for another Amazon gift card of $25.

- On Friday, October 15, noteworthy solutions will be presented and the lucky winners will be decided. There will be a follow-up email about this meeting. Stay tuned.
- Please contact Prof. Lei, Yue (ylei2@ucmerced.edu) if you have questions.