

Submit your solutions before the finishing date to the address: ProbOfTheWeek@utdallas.edu

Problem of the Week

Finishing date: 09/22/2017

Among other things, the architect and inventor Buckminster Fuller popularized the geodesic dome. One of his domes, built for the 1967 World's Fair in Montreal, Canada, is still on display.

Due to the resemblance with Fuller's domes, certain large carbon molecules were eponymously named after him – more precisely, the spherical fullerenes are convex polyhedra where all faces are hexagons or pentagons (not necessarily regular), with each vertex contained in three faces. For example, the molecule buckminsterfullerene is the same shape as a soccer ball.

How many pentagonal faces does every fullerene have?

Names of winners will be posted on the departmental website.



All the information about the Problem of the Week challenge can be found at <http://ProbOfTheWeekUTD.wordpress.com>

