E1: Yes.
E2: Four coins.
E3: 6.
E4: A maximum of 8 and 16 different notes (fewer for most real trumpets).
E5: 190 handshakes.
E6: 5550001 or 5552802.
E7: Ten times.
E8: 0 or 2/5.
E9: Archimedes, Penrose, Fermat, Zeno, Euclid.
E10: 37.

M1: Cut the pizzas in half, but five pieces is the minimum.
M2: The same (roughly).
M3: The first player can force a win.
M4: It doesn't matter.
M5: $3^{21}$.
M6: The rings have the same area.
M7: Alphabetical order.
M8: The area is 1/4.
M9: A circle, and ellipses.
M10: 2 or 4, or neither.

H1: 42 meters (Vale, Douglas Adams).
H2: Six ways in total.
H3: Six shuffles.
H4: Yes.
H5: Yes, you should switch.
H6: Yes, the path is possible.
H7: Yes, there are enough boxes.
H8: We let you choose first.
H9: There is zero area left, but infinitely many points.
H10: 7/4.