3. We want to use Hough transform to identify the presence of parabolas in an edge image. Consider a parabola given by this equation $y = ax^2 + bx + c$. The Hough space for identifying parabolas is
   (a) One dimensional
   (b) Two dimensional
   (c) Three dimensional
   (d) Four dimensional

4. Following question 3, the parabola in space corresponds to what in the Hough space
   (a) Parabola (b) Line (c) Sphere (d) Plane

5. Following question 3, the general equation of the entity corresponding to the parabola in the Hough space is given by
   (a) $ax + by = c$
   (b) $ax + by + z = c$
   (c) $y^2 = 4ax$
   (d) $x^2 + y^2 + z^2 = 1$