1. Give the $y$-coordinate of the centroid for the region bounded by $y = x^2$ and $y = 4$.
   a. 2
   b. 11/5
   c. 12/5
   d. 13/5
   e. 14/5
   f. None of these.

2. Give the $x$-coordinate of the centroid for the region bounded by $y = x^2$ and $y = 4$.
   a. -1/5
   b. -1/10
   c. 0
   d. 1/10
   e. 1/5
   f. None of these.

3. Give the $y$-coordinate of the centroid for the region in the first quadrant bounded by $y = x^2 + 1$ and $y = 3 - x^2$.
   a. 2
   b. 11/5
   c. 12/5
   d. 13/5
   e. 14/5
   f. None of these.

4. Give the $x$-coordinate of the centroid for the region in the first quadrant bounded by $y = x^2 + 1$ and $y = 3 - x^2$.
   a. 1/8
   b. 1/4
   c. 3/8
   d. 1/2
   e. 5/8
   f. None of these.

5. Give the average value of the function $f(x) = x^2 - x$ over the interval $[0,3]$.
   a. 3/4
   b. 1
   c. 5/4
   d. 3/2
   e. None of these.