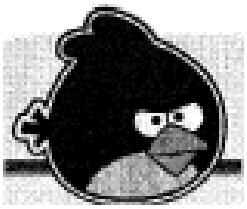
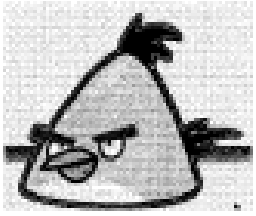
Angry Birds™ Project

- ✓ All work must be shown and answers clearly labeled
- ✓ Graphs should be done on graph paper with axes clearly labeled
- ✓ Graphs should be large (one per page) and show only the first quadrant
- ✓ Drawings of each bird should appear on the graphs

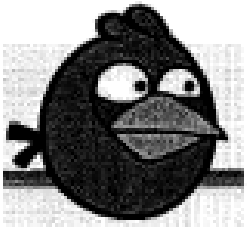
For each equation let **"y"** represent the bird's **height off the ground** and **"x"** represent its **horizontal distance**



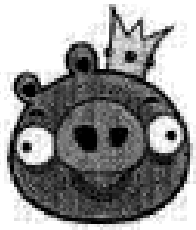
1. Red bird's flight path is represented by the equation $y = -x^2 + 16x - 15$. Determine the distance at which he will hit the ground by factoring. Draw the graph of the bird's flight path.



2. Yellow bird's flight path is represented by the equation $y = -x^2 + 14x - 24$. Determine the distance at which he will hit the ground using the quadratic formula. Draw the graph of the bird's flight path.



3. Blue bird began at the location (6,0) and hit the ground at (26, 0). Find the polynomial equation for his flight path and draw its graph.



4. Determine which of the birds (Red, Yellow or Blue) hit the King Pig located at (5, 21). Be sure to include a picture of King Pig in the graph of the bird who hit him.