Computing Homework – 13/11/2015

1. 1. The resolution of a bitmapped image is the number of pixels in the image; representing the width of the image (in pixels) by the height of the image in pixels. The resolution could also be represented in ppi, pixels contained in a square inch of the image.
   2. The colour depth represents the number of bits, representing the number of colour combinations that the pixel can contain.
   3. 10x10xlog2(16) = 100 x 4 = 400 bits = 400 / 8 bytes = 50 bytes
   4. Perfect scaling
2. 1. There must be at least 4 possibilities for colour for each pixel, requiring 2 bits, since this would allow 4 values: 00, 01, 10, 11
   2. 1111 1100 0011 1011
   3. 2 x 8 x 8 = 128 bits = 128/8 bytes = 16 bytes
   4. 1. The size of each eye
      2. The placement (in coordinate manner) of each eye
      3. The length (vector representing) the mouth
   5. 1. Vector images allow for perfect scaling
      2. Vector images use less storage space