Math 133, Quiz #2

- 1. Which of the following functions are one-to-one ?
 - (a) f(x) = 2x + 1(b) $f(x) = x^4$ (c) $f(x) = \sqrt{x}, x \ge 0$ (d) $f(x) = x^2, x \ge 0$ (e) $f(x) = \cos x$
- 2. A bag of sand originally weighing 144 lb was lifted at a constant rate. As it rose, sand also leaked out at a constant rate. The sand was half gone by the time the bag had been lifted to 18 ft. How much work was done lifting the sand this far ? (Neglect the weight of the bag)