## Math 133, Quiz \#2

1. Which of the following functions are one-to-one?
(a) $f(x)=2 x+1$
(b) $f(x)=x^{4}$
(c) $f(x)=\sqrt{x}, x \geq 0$
(d) $f(x)=x^{2}, x \geq 0$
(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)
