Finding Global Maxima and Minima

Find the (global) maximum and minimum of the followings functions, if they exist:

1. $h(t) = t^3 - 3t + 1,\ 0 \leq t \leq 3$

2. $A(x) = x(100 - x),\ 0 \leq x \leq 50$

3. $MR(q) = .01q^2 - q + 13,\ 0 \leq q \leq 90$

4. $D(x) = \sqrt{x^2 - x + 1},\ 0 \leq x \leq 1$

5. $g(x) = \cos x + \sin x,\ 0 \leq x \leq \pi$

6. $s(r) = 2\pi r^2 + \frac{20}{r},\ r > 0$

7. $f(x) = x^{\frac{1}{3}},\ 1 \leq x \leq 8$

8. $p(x) = \frac{27k}{x} + \frac{8k}{(8-x)},\ 0 \leq x \leq 8$, (use calculator to find root, the k is a constant)