1

Is x^2 + y^2 > 100?

(1) 2xy < 100

(2) (x + y)^2 > 200

2

In the xy-plane, region R consists of all the points (x,y) such that $2x+3y \leq 6$. Is the point (r,s) in region R?

(1) $3r+2s = 6$

(2) $r \leq 3$ and $s \leq 2$

3

x and y are positive integers such that x=8y+12, what is the greatest common divisor of x and y?

(1) X=12u, where u is an integer.
(2) Y=12z, where z is an integer.