Homework #4 MME 529

page 259 Burton (end of 11-2)

1, 2 (omit the words "The only") , 3 but change to "both x and y cannot be perfect squares". ,11 (again omit "The only")

Additionally:

Use software to investigate the distribution of primes. Specifically, develop a table showing intervals of length 100, starting at x=0 and going to 1000 (so 10 entries). The table should show the number of primes in each interval and also the cumulative number of primes from 2 to the higher end of the interval. So three columns:

interval	# primes in interval	total primes from 2 to end of interval
[2,100]	25	25
[101,200]	21	46
[201,300]	16	62
[901,1000]		

How many are there between 10,000,001 and 10,000,100 ?

What does all this data suggest?