Finals

Quiz 1 (10 pts. each, total of 20 pts.)

1. Find the HCF of 270 and 192.

   270 = 192 * 1 + 78
   192 = 78 * 2 + 36

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   192 = 78 * 2 + 36
   78 = 36 * 2 + 6

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   36 = 6 * 6 + 0

   HENCE,
   HCF (270, 192) = 6

2. Find the factors of 91 using Fermat Factorization Algorithm.

   N = 91

   SQUARE ROOT OF 91 IS 9.539 OR 10

   A = 10

   $B^2 = A^2 – N$
   $B^2 = 100 – 91 = 9$

   SQUARE ROOT OF 9 IS 3

   B = 3

   (A+B) = 10 + 3 = 13
   (A- B) = 10 - 3 = 7

   N = (A+B)(A-B)
   N = (13)(7) = 91