

book problems

§7.3 # 1, 5, 8, 9, 11

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Extra Credit, 1 point each (hint: a computer will help, but don't prove #1 by brute force):

1. Prove that $\phi(n)/n > 1/6$ for all positive integers

$$n < 200000000 = 2 * 10^8.$$

2. Prove that $\phi(n)/n < 1/100$ has infinitely many solutions.