MATHEMATICS ENRICHMENT CLUB. Solution Sheet 7, June 9, 2015¹

1. If we x x

Now the integral solutions to f(x) = 2016 are the integral solutions to g(x) = 1, but there is no integral solution to g(x) = 1, because in the expression $g(x) = c(x \ a_1)(x \ a_2)(x \ a_3)(x \ a_4)(x \ a_5)h(x)$, each $(x \ a_i)$, i = 1

of P(x) by

$$a_{99} = r_{i}$$

$$a_{98} = r_{i}r_{j}$$

$$a_{97} = r_{i}r_{j}r_{k}$$

$$\vdots$$

$$1 =$$

Hence 14n + 11 is divisible by 5 and 3 alternately, and can never be prime.