1999 FIS.1

若 a 為能整除 $3^{11}+5^{13}$ 的最小質數，求 a 之值。

If a is the smallest prime number which can divide the sum $3^{11}+5^{13}$,
find the value of a .

2003 FG1.4

兩質數之和為 105。若這兩質數之積為 d，求 d 的值。

Given that the sum of two prime numbers is 105.
If the product of these prime numbers is d, find the value of d .

2006 HG1

設 a、b 和 c 是三個質數。若 $a<b<c$ 及 $c=a^2+b^2$，求 a 的值。

Let a, b and c are three prime numbers.
If $a<b<c$ and $c=a^2+b^2$, find the value of a .

2010 FI2.1

若 a，p，q 是質數，且滿足 $a<p$ 及 $a+p=q$，求 a 的值。

If a, p, q are primes with $a<p$ and $a+p=q$, find the value of a .

2010 FG3.1

求 $101^{303}+301^{101}$ 的最小質因子。

Find the smallest prime factor of $101^{303}+301^{101}$.

2011 HI8

學校推出每張面值為$10、$15、$25 及 $40 的四種賣物券。甲班用若干張 $100 紙幣買了 30 張賣物券，包括其中兩種賣物券各 5 張及另外兩種賣物券各 10 張。問甲班共用了多少張 $100 紙幣購買賣物券？

A school issues 4 types of raffle tickets with face values $10, $15, $25 and $40.
Class A uses several one-hundred dollar notes to buy 30 raffle tickets, including
5 tickets each for two of the types and 10 tickets each for the other two types.
How many one-hundred dollars notes Class A use to buy the raffle tickets?

Answers

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