Which two numbers when added together yield 16, and when multiplied together yield 55.

If x + y = 16 and xy = 55, then (since: = 8) we can let x = 8 + z and y = 8 – z (and it won't hurt to suppose that z is positive).

If:

xy = 55

(8 – z) (8 + z) = 55

64 – z2 = 55

z2 = 9

z = 3

Then:

x = 8 + 3 = 11

y = 8 – 3 = 5

Just to add more context. The above method was described in the book Arithmetica by the mathematician Diophantus in the third century AD.

PERSONAL

Resolviendo por Diofanto (de Alejandría):

Promedio:

Calculando desconocido:

U2 = (8)2 – 55 = 64 – 55 = 9

U = = 3

Construcción:

x = (8) + 3 = 11

x = (8) – 3 = 5