

1. Partial Products Area Model:
 34×46

Multiplication using Partial Products

The diagram illustrates the multiplication of 34 by 46 using the partial products area model. The number 34 is decomposed into 40 and 6, and 46 is decomposed into 30 and 4. These are used to calculate four partial products: 1200, 160, 180, and 24, which are then summed to get the final product 1564.

	30	4
40	1200	160
6	180	24

1200
160
180
+ 24

1564