

Multiplication Strategies (3 x 2)

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325x41

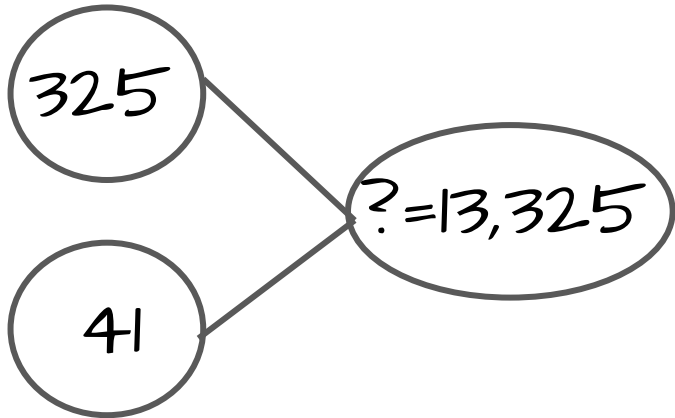
What does
this mean?

Picture

325 x 41

$$325 \times 41 = 41 \times 325$$

325 groups of 41



Partial
Product

Area
Model
(Matrix)

325 x 41

$$300 \times 40 = 12,000$$

$$300 \times 1 = 300$$

$$20 \times 40 = 800$$

$$20 \times 1 = 20$$

$$5 \times 40 = 200$$

$$5 \times 1 = \quad \quad \quad + \quad \quad \quad 5$$

$$\underline{\quad \quad \quad 5}$$

$$13,325$$

325 x 41

	40	1	
300	12,000	300	= 12,300
+			
20	800	20	= 820
+			
5	200	5	= <u>+205</u>
			13,325

Distributive
Property

Traditional
Algorithm

$$325 \times 41$$

$$(300+20+5) \times (40+1)$$

$$(300 \times 40) + (300 \times 1) + (20 \times 40) + (20 \times 1) + (5 \times 40) + (5 \times 1)$$

$$12,000 + 300 + 800 + 20 + 200 + 5$$

$$12,000 + 1,300 + 20 + 5$$

$$13,325$$

$$325 \times 41$$

$$+1H +2T$$

$$325$$

$$\times \underline{41}$$

$$325$$

$$+ \underline{13,000}$$

$$13,325$$