2-Digit × 2-Digit Multiplication

1) Complete the long multiplication calculations.

a)

			3	6
		×	3	2

b)

			4	6
		×	3	3

c)

			1	4
		×	2	3

d)

			2	5
		×	3	6

e)

			3	5
		×	5	6

f)

			4	3
		×	3	3

2) Vanilla cupcakes are sold in packs of 16. Chocolate cupcakes are sold in packs of 22. Bartek buys 23 packs of vanilla cupcakes and 45 packs of chocolate cupcakes. How many cupcakes does he have altogether?

3) Olive has multiplied 33 by 43. What mistake has she made? Explain your reasoning.

			3	3
		×	4	3
			9	9
		1 $_1$	3 $_1$	2
		2	3	1
			$_1$	$_1$

_____

_____

2-Digit × 2-Digit Multiplication **Answers**

a)

			3	6
		×	3	2
		7₁	2	
	1	0₁	8	0
	1	**1**	**5**	**2**
		₁		

(36 × 32: partial products 7 2 and 1 0 8 0; answer 1 1 5 2)

b)

			4	6
		×	3	3
		1	3₁	8
	1	3₁	8	0
	1	**5**	**1**	**8**
		₁		

c)

			1	4
		×	2	3
		4₁	2	
		2	8	0
	3	**2**	**2**	
		₁		

d)

			2	5
		×	3	6
		1	5₃	0
		7₁	5	0
	9	**0**	**0**	
		₁		

e)

			3	5
		×	5	6
		2	1₃	0
	1	7₂	5	0
	1	9	6	0

f)

			3	3
		×	4	3
		1	2	9
	1	2	9	0
	1	**4**	**1**	**9**
		₁		

2) **23 × 16 = 368**
   45 × 22 = 990
   368 + 990 = 1358

3) **Olive has forgotten to use zero as a placeholder when multiplying 2 tens by 5. Her answer should be 910.**