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					(b)												
						1	2	3	2	1							
1	2	3	2	1		2	4	6	4	2							
1	2	3	2	1		3	6	9	6	3							
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	1	1	1			1	2	3	2	1							
	2	2	2			2	3	5	3	2							
	3	3	3			3	5	8	5	3							
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Fig. 12 Matching by normalized cross correlation: some simple examples. (a) Picture g and template f. (b) Cross correlation  $C_{fg}$ . (c)  $\sum\sum g^2$ . (d)  $C_{fg}/\sqrt{\sum\sum g^2}$ ; values less than 1 have been discarded. Note that the perfect match value  $(\sqrt{3})$  is not much better than the near misses in position  $(\sqrt{2}$ 's) and in shape  $(3/\sqrt{5}$ 's). All points not shown are 0's.

 $<sup>^{\$}</sup>A = 2/\sqrt{3}$ ; B =  $3/\sqrt{5}$ .