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Summary. We give an example of how mathematics is used in engineering by discussing whether a high-resolution CMOS imager, used in digital cameras, can be manufactured according to a client's specifications. We relate defects in a rectangular array of pixels to polyominoes in order to count how many multipixel, or adjacent, defects are expected for a given number of single-pixel, or isolated, defects in a pixel array. This is done to quantify the expected number of multipixel defects in a given pixel array.

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SOLUTION TO PINEMI PUZZLE

			8		5		4	3	
	16			6		7	7		3
			12	11	7	8		8	4
6	9	8							
	4		10			9	9		8
4		7		8	10		12	11	
	7		6		9				9
6		5	6				11		
	7		7		10		8		
4		5				7		6	3