Problem of the Block - Block 7

Pascal's Triangle

$n = 0$						1						
$n = 1$					1		1					
$n = 2$				1		2		1				
$n = 3$			1		3		3		1			
$n = 4$		1		4		6		4		1		
$n = 5$	1		5		10		10		5		1	

Excluding the 1s on the left and right sides, show that any two entries in the same row of Pascal's triangle have a common factor greater than one.

Turn in solutions to Dr. Bean in Law 206E or by email at sbean@cornellcollege.edu by April 11. Solutions for only one/some questions or partial solutions will receive credit (and are encouraged!). Submitting solutions for the Problem of the Block can earn culture points toward the major in mathematics. For more information about the Problem of the Block, including the current leader board for the yearly competition, and to print off your own copy visit http://www.cornellcollege.edu/mathematics/problem-of-the-block/index.shtml.