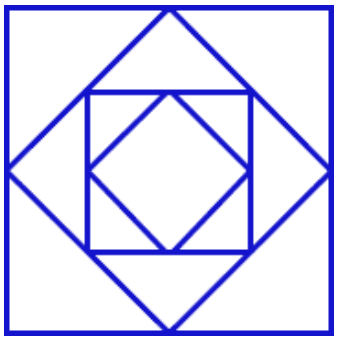
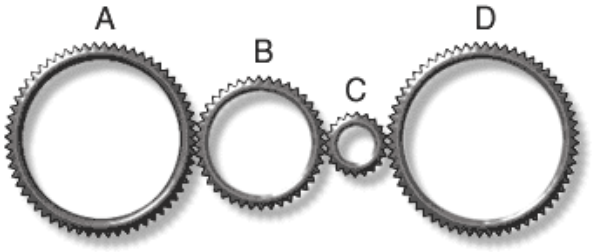
Advanced Logic Worksheet

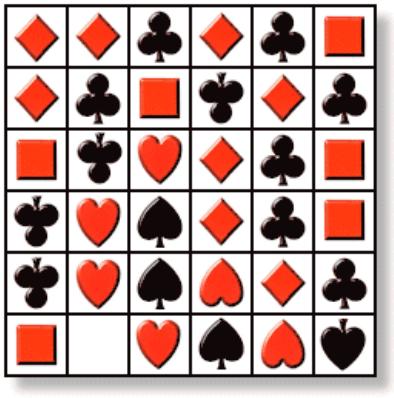
TRACING LINES:
How is it possible to trace this design in one continuous movement without crossing a line on the way?



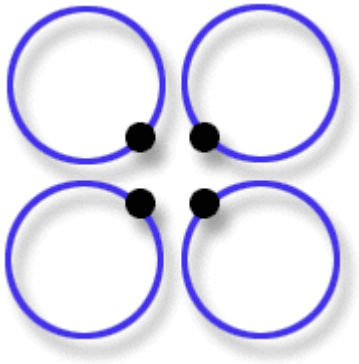
GEARS:
Gears A and D have 60 teeth each, gear B has 40 teeth, and gear C has 20 teeth. Suppose that gear B makes twenty complete turns every minute, explain the relative speed of gears A and D?



MISSING SYMBOL:
Complete the square logically.



FOUR TRACKS:
Four rollerbladers exercise around separate circular paths; each path is one third of a mile in length. They start simultaneously at the black spots, with speeds of six, nine, twelve, and fifteen miles per hour. By the end of the 20 minute workout, how many times will they have simultaneously returned to the spots where they started?



SUDOKU CHALLENGE:
The sudoku puzzle consists of a 9x9 grid that has been subdivided into 9 smaller boxes. Each **box** consists of a grid of 3x3 squares. Each sudoku puzzle has a logical and unique solution. **To solve the puzzle, each row, column and box must contain each of the numbers 1 to 9.**

4								9
					1	8		
1		2		8				4
				7	3		4	5
	9		5		6		8	
6	3		8	4				
5				9		1		2
		9	6					
3								7