

## Professor Powers' Wind Turbine Logic Game

Professor Max Powers has decided to build a wind turbine but doesn't know what style would be best. He enlists the help of 4 students. Each student comes up with a different blade shape and number of blades. They brought him their designs, but he has dropped the folder and needs your help piecing it back together. Use the clues below to match the student, blade number, and blade shape.

Clue 1: Either Ariel or the turbine with 4 blades has blade shape B

Clue 2: Wendy designed blade shape A

Clue 3: Wattson's design, the design with 4 blades, and blade shape D are 3 different designs.

Clue 4: Of the designs with 4 blades and design B, one is Ariel's and the other is Wendy's.

Clue 5: Wattson's design has 2 more blades than Ariel's design.

		Students				Number of Blades			
		Wendy	Wattson	Ariel	Joulien	2	3	4	5
Blade Shape	 A								
	 B								
	 C								
	 D								
Number of Blades	2								
	3								
	4								
	5								

Hint: place an X in any box that cannot be true and a star in any box that must be true. Anytime a star is placed, X's can be placed in all other boxes in that column and row.

Example 1: when a star is placed based on the clues, X's can be placed in all the other boxes in the row and column

	-	=	≡	≧	1	2	3	4
A		X						
B		X						
C	X	☆	X	X				
D		X						
1								
2								
3								
4								

Example 2: Completed puzzles should look like this.

	-	=	≡	≧	1	2	3	4
A	X	X	X	☆	X	X	☆	X
B	☆	X	X	X	☆	X	X	X
C	X	☆	X	X	X	☆	X	X
D	X	X	☆	X	X	X	X	☆
1	☆	X	X	X				
2	X	☆	X	X				
3	X	X	X	☆				
4	X	X	☆	X				

# Energy Unit Conversion Puzzle

People in the energy industry frequently have to convert from one energy unit to another. For example, there are 0.000947 BTUs (British Thermal Units) in one Joule. Use the following logic puzzle to determine how many BTUs there are in one kWh.

This four-digit number is composed of two pairs of sequential numbers. If you transpose the two pairs, all four digits will be sequential. The last two numbers equals the product of the first two numbers and the sum of all digits equals the base of the metric system.