Long Battleships

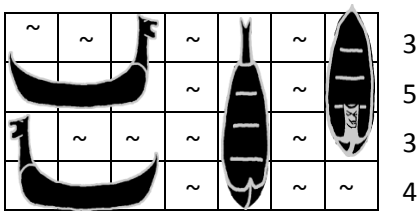
by Jett Jones

Look upon our ships as they prepare for mighty conquest.

Battleship rules:
The battleship grid contains hidden ships of different lengths, oriented horizontally or vertically. No two ships can be adjacent, not even diagonally. The numbers along the sides indicate the total occupied cells in that row or column. Parts of ships or empty (water) cells may be given as a solving aid.

Modified rules:
The longboats in the grid each have a large prow, which is counted as a shaded square for rows and columns, but not for the sake of adjacent boats. The prow will overlap a different square depending on the orientation of the boat, see this example grid. Only one boat of each length will face in each cardinal direction. The boats given to the right of each board are in their final orientation, and will not be rotated.

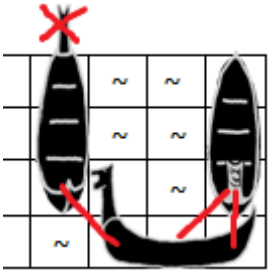
Sample grid for length-three ships.

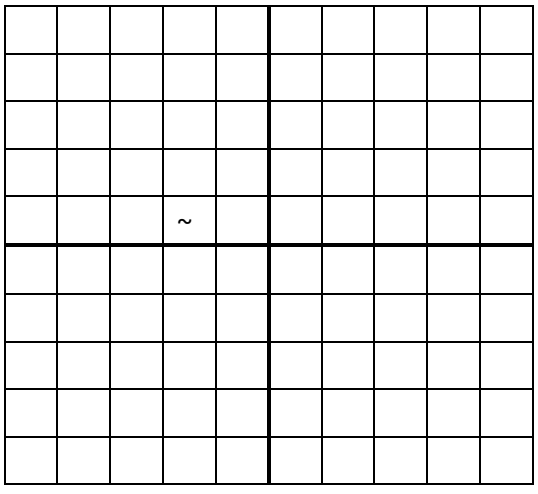


3 2 3 0 4 0 3

3 5 3 4

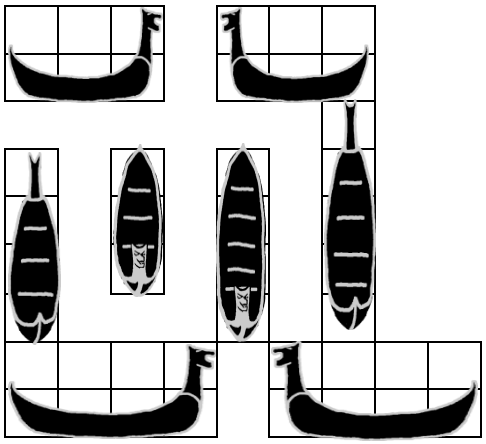
Invalid placements:



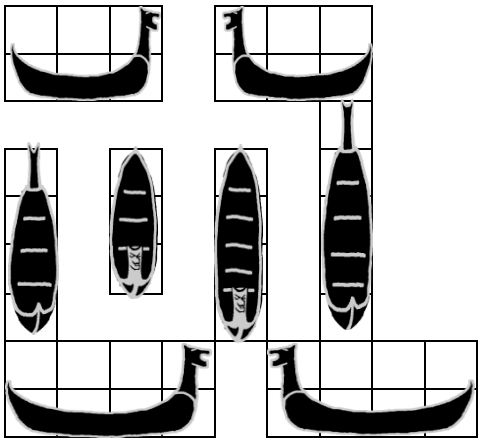


2 7 0 1 3 6 3 4 3 5

3 0 9 2 6 1 5 2 2 4



										1
										3
										8
										2
										7
										2
										3
										3
										3
~										2
7	2	2	2	0	10	1	6	2	2	



To read out the final answer assign a letter to each boat using the following chart:

e	q	u	e	s	t	r	i	a	n
v	a	u	d	e	v	i	l	l	e
w	o	l	v	e	r	i	n	e	s
w	h	a	l	e	t	e	e	t	h
i	n	t	o	x	i	c	a	t	e
r	h	i	n	o	v	i	r	u	s
a	l	p	h	a	b	e	t	i	c
r	o	t	i	s	s	e	r	i	e
p	o	s	t	h	u	m	o	u	s
e	s	p	e	c	i	a	l	l	y