

# Unit 6 Problem Set

3 marks each + 3 marks for proper mathematical form

/15

- The table below shows the binary notation of the decimal numbers 0 to 4. State the binary notation of the decimal number 26.

0000 = 0

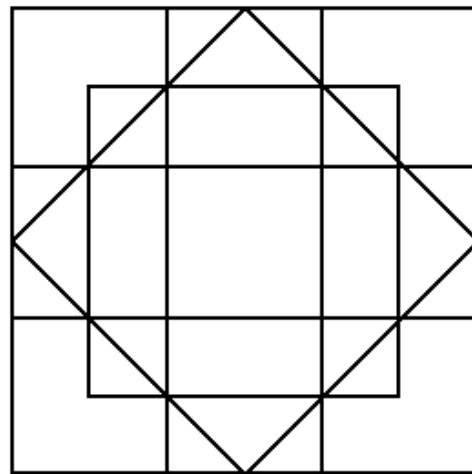
0001 = 1

0010 = 2

0011 = 3

0100 = 4

- How many squares do you see?  
(List all in your solution.)



- A boy has as many sisters as brothers, but each of his sisters has three times more brothers than sisters. How many sisters are in the family?

- Battleships Solitaire is a solitaire version of the classic strategy game, in which you must hunt down and sink a fleet of enemy ships. Ships are listed on the side of the puzzle.

Each puzzle contains a row and column of numbers which indicate the number of squares in each row/column that contain a ship or ship segment. Most squares are empty, for you to fill in, but some will be givens, which indicate water, specific ships, or parts of ships. No ship may touch another ship, even diagonally.

	3	2	1	5	0	3	2	3
3								
1								
3								
3								
4								
0								
3								
2								