## Linear Inequalities - Regions - www.m4ths.com

(1) List ALL the integer pairs for $x$ and $y$ satisfy the 4 inequalities below. Use a graph to help!
$x+y<6 \quad x-y \leq 6 \quad 1<x \leq 4 \quad y \geq-2$

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| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :--- | :--- | :--- |

(2) List ALL of the integer pairs for $x$ and $y$ satisfy the 3 inequalities below. Use a graph to help!

$$
y<3 x-1 \quad y \leq 2-x \quad y \geq-3
$$


(3) List the 4 inequalities that satisfy the region $R$

(4) (a) State the only integer coordinates that satisfy the inequality shown below in the Region $R$.
(b) Find the 4 inequalities that make up the region R

(5) The only integer pairs to $a \leq x<b$ and $c<y \leq d$ are $(-1,1)(0,1)(1,1)(-1,0)(0,0)(1,0)(-1,-1)(0,-1)(1,-1)$ $(-1,-2)(0,-2)$ and $(1,-2)$. Find the values $a, b, c$ and $d$.

