Math Help Sheet: Graphing Tips

Let's work with the problem $2x - y > 5$

To solve for y: $-y > 5 - 2x$
$y < -5 + 2x$

First let's find some points (with an inequality such as this, we want "border points," or values that make the problem equal).

x	y
–1	–7
0	–5
1	–3
3	1

Now we need to label the scale of the axes so our points can be graphed.

Plot your points on your graph.

Connect your points (in the case of a line, a ruler can be helpful).
Use the appropriate line style.

Use a dashed line for < and >.
Use a solid line for ≤ and ≥.
Since this problem is "greater than," we use a dashed line.

Put arrows at the ends of the line to indicate that the line continues.
If the graph is of an inequality, test a point to determine where to shade.

Let's test point A at (–2, 2).
$2x - y > 5$
$2(-2) - (2) > 5?$

$-4 - 2 > 5?$
Since the statement is false,
we shade the side that does not contain point A.