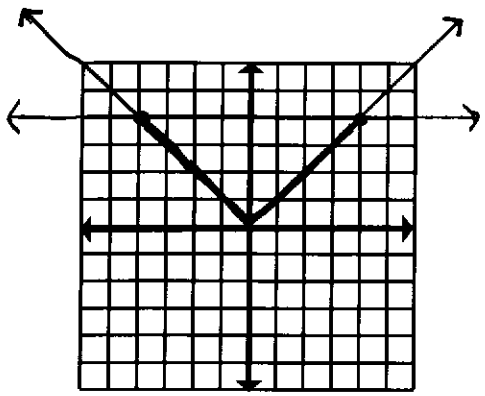
Algebra II

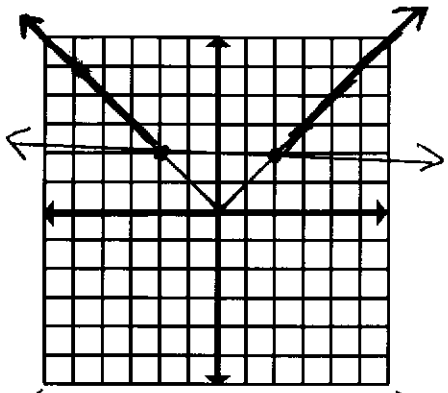
Solve each inequality graphically. State your answer using interval notation.

1) $|x| < 4$



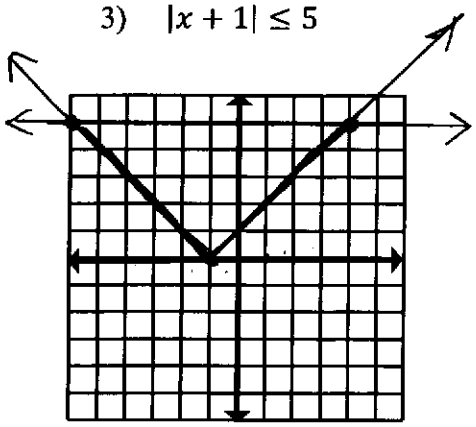
$(-4, 4)$

2) $|x| \geq 2$



$(-\infty, -2] \cup [2, \infty)$

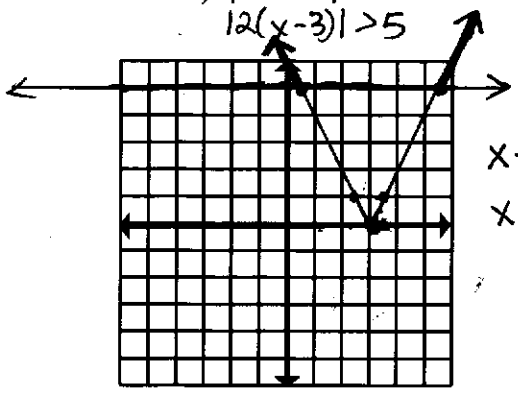
3) $|x + 1| \leq 5$



$[-6, 4]$

4) $|2x - 6| > 5$

$|2(x-3)| > 5$



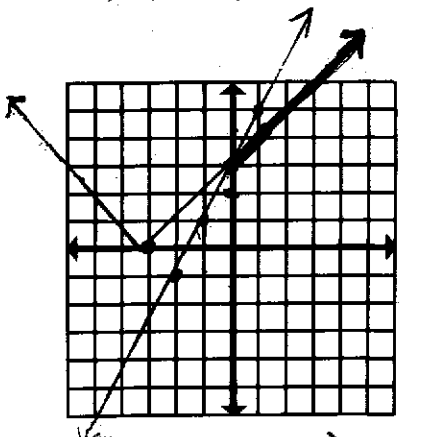
$(0,0)\ (1,1)\ (-1,1)$

$x \div 2\ (0,0)\ (\frac{1}{2},1)\ (-\frac{1}{2},1)$

$x + 3\ (3,0)\ (3\frac{1}{2},1)\ (2\frac{1}{2},1)$

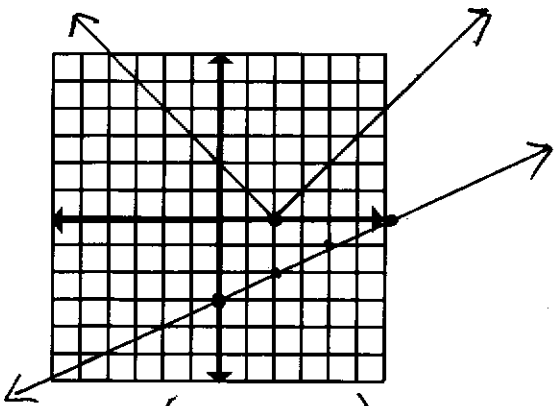
$(-\infty, .5) \cup (5.5, \infty)$

5) $|x + 3| < 2x + 3$



$(0, \infty)$

6) $|x - 2| \geq \frac{1}{2}x - 3$



$(-\infty, \infty)$