Subject: Question 4

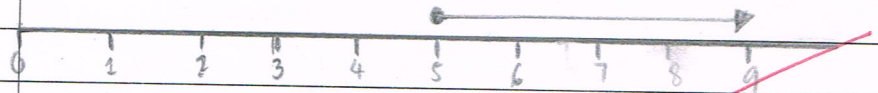
No:

Date:

Intensive Mathematics Test 2017

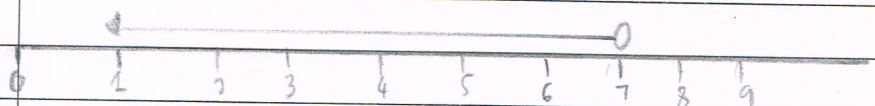
a)

i) $x \geq 5$

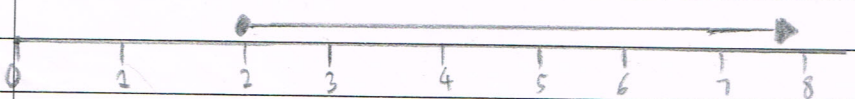


Checked 3/10/18

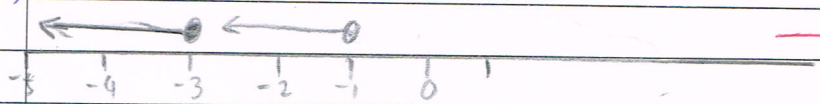
ii) $x < 7$

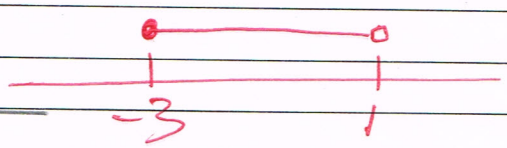


iii) $x \geq 2$



iv) $-3 \leq x < -1$





b)

i) $3x - 4 < 5$

$3x - 4 + 4 < 5 + 4$

$\frac{3x}{3} < \frac{9}{3}$

$x < 3$

ii) $4 - 3x \geq x$

~~$4 - 3x - x \geq 0$~~

~~$4 - 2x \geq 0$~~

$3x - x - 4 \geq 0$

$2x - 4 + 4 \geq 4$

$\frac{2x}{2} \geq \frac{4}{2}$

$x \geq 2$

c) ~~$5(x+3(1-x)+2) \geq 5$~~

~~$5x+15(5-5x)+10) \geq 5$~~

~~$5x-5x+15-5+10 \geq 5$~~

$5(x+3(1-x)+2) \geq 5$

$5(x+3-3x+2 \geq 5$

$5(-2x+5) \geq 5$

$-10x+25 \geq 5-25$

$-10x+25-25 \geq 5-25$