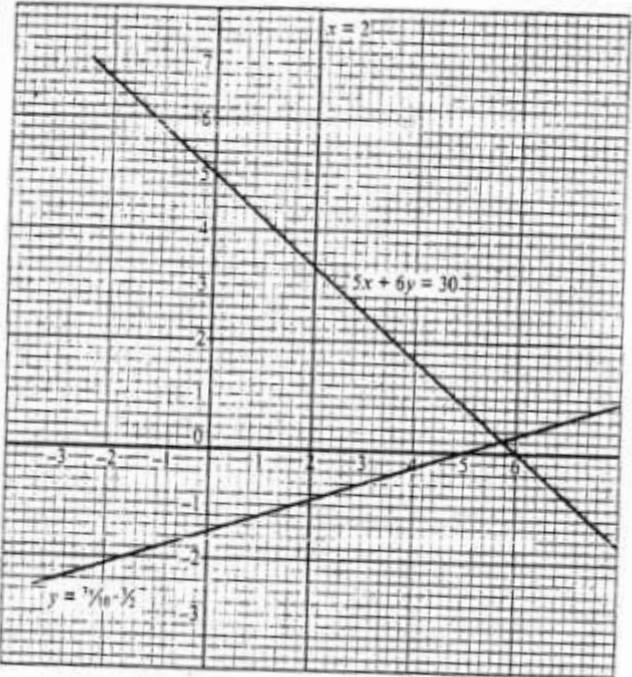
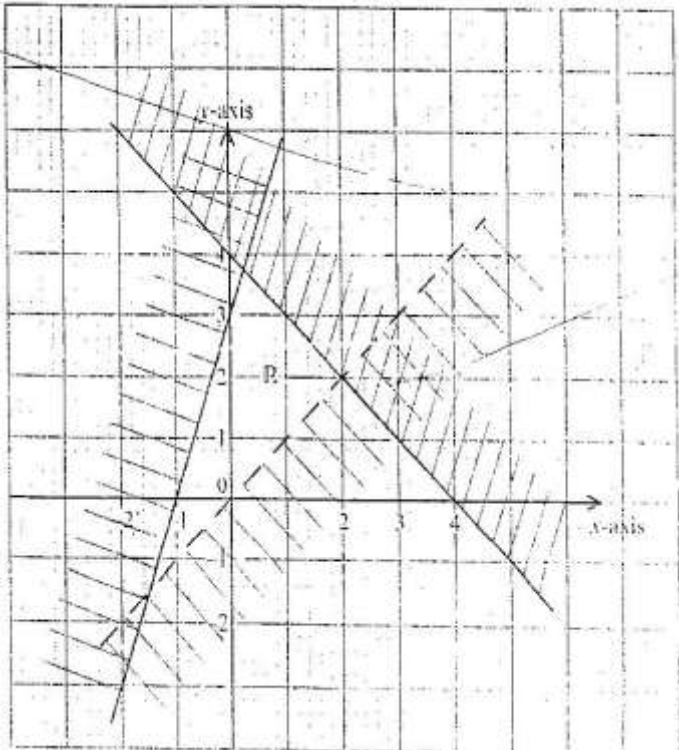


LINEAR INEQUALITIES

KCSE 1989 – 2012 Form 2 Mathematics

1.	1999 Q 2 P2	Find the range of x if $2 \leq 3 - x < 5$	(2 marks)
2	2000 Q 6 P2	Find all the integral value of x which satisfy the inequalities $2(2-x) < 4x - 9 < x + 11$	(3 marks)
3	2001 Q 16 P2	The diagram below shows the graph of: $y = \frac{3}{10}x - \frac{3}{2}$, $5x + 6y = 30$ and $x = 2$	
			
By shading the unwanted region, determine and label the region R that satisfies the three inequalities. $y \geq \frac{3}{10}x - \frac{3}{2}$, $5x + 6y \geq 30$ and $x \geq 2$ (4 marks)			
4	2002 Q 8 P1	Solve the following inequalities and represent the solutions on a single number line: $3 - 2x < 5$ $4 - 3x \geq -8$	
(3 mks)			

5	<p>2003 Q 12 P2 A mixed school can accommodate a maximum of 440 students. The number of girls must be at least 120 while the number of boys must exceed 150. Taking x to represent the number of boys and y the number of girls, write down all the inequalities representing the information above. (3 mks)</p>
6	<p>2004 Q 15 P2 Form the three inequalities that satisfy the given region R.</p> 
7	<p>2006 Q 5 P1 Solve the inequality $3 - 2x < x \leq \frac{2x+5}{3}$ and show the solution on the number line (4 mks)</p>
8	<p>2010 Q 5 P1 The sum of three consecutive odd integers is greater than 219. Determine the first three such integers. (4 mks)</p>
9	<p>2011 Q 4 P2 Solve the inequalities $2x - 5 > -11$ and $3 + 2x \leq 13$, giving the answer as a combined inequality. (3 mks)</p> <p>a) List the integral values of x that satisfy the combined inequality in (a) above (1 mk)</p>