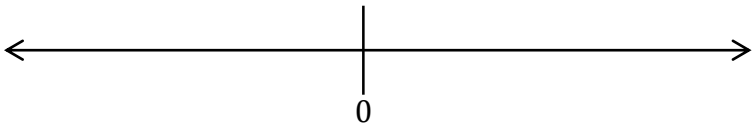
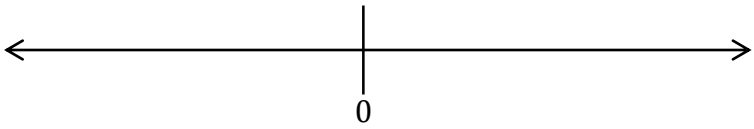
Inequalities Set:1

1. Solve the following inequalities and show your answer on the number line.

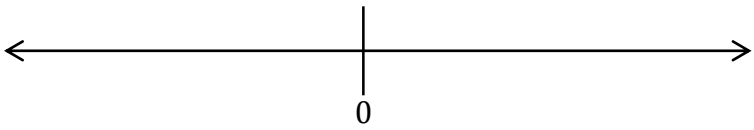
$a)\ 4x - 5 \geq 3$



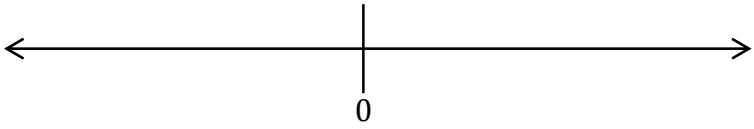
$b)\ 11 \geq 5 - 2x$



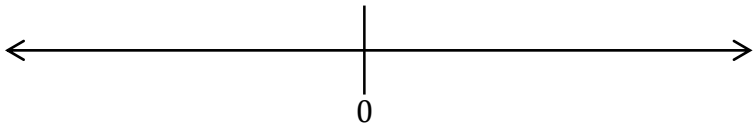
$c)\ 8\left(\frac{x}{12} - 1\right) < 4\left(\frac{x}{15} + 2\right)$



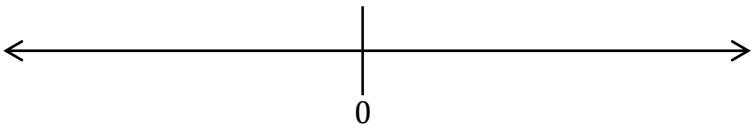
$d)\ 2 < 3x - 8 \leq 14$



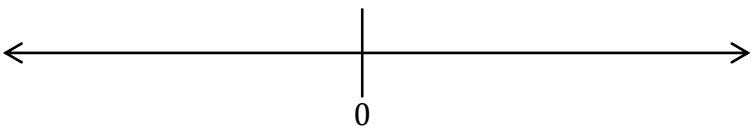
$e)\ 3x - 4 < 5x - 12 \leq 6$



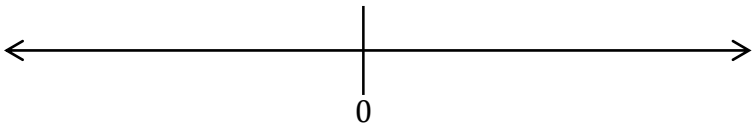
$f)\ \frac{3x-5}{6} < 3x$



$g)\ \frac{9x-2}{2} < \frac{3x+5}{5}$

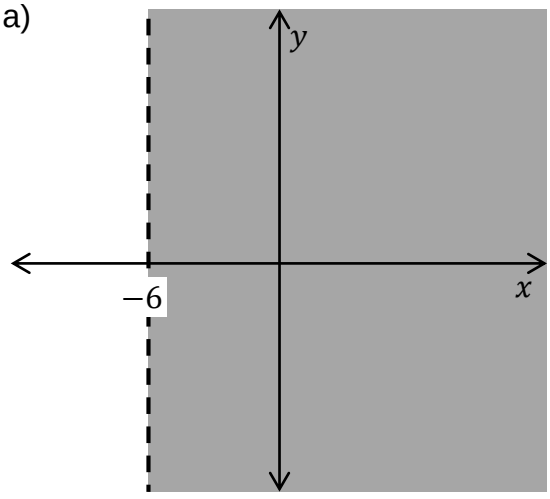


$h)\ \dfrac{2x-4}{3} < \dfrac{x-2}{4} \leq \dfrac{x-1}{5}$

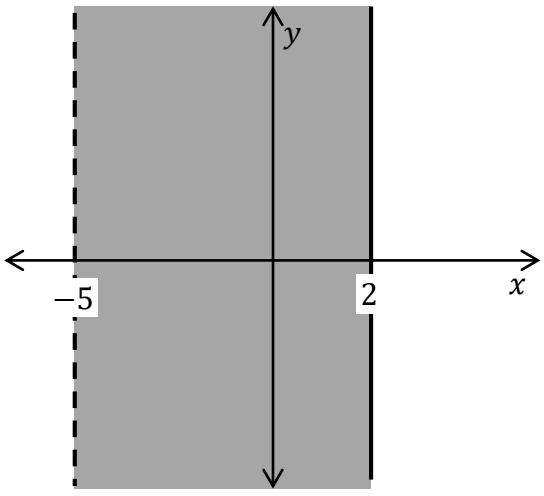


2. Describe the shaded region using one or more appropriate inequalities.

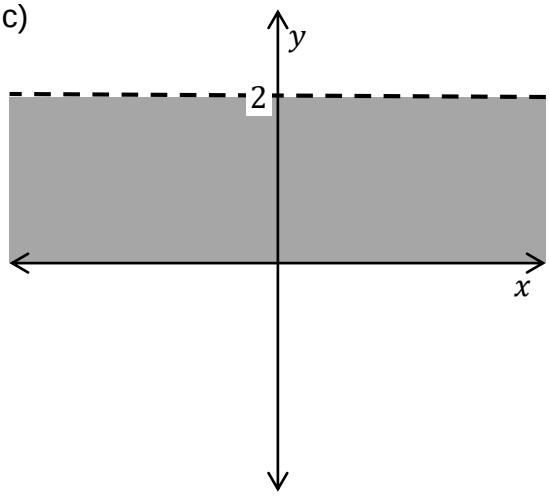
a)



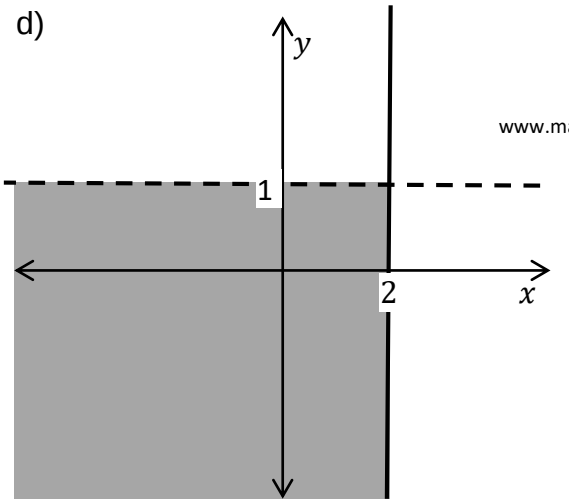
b)



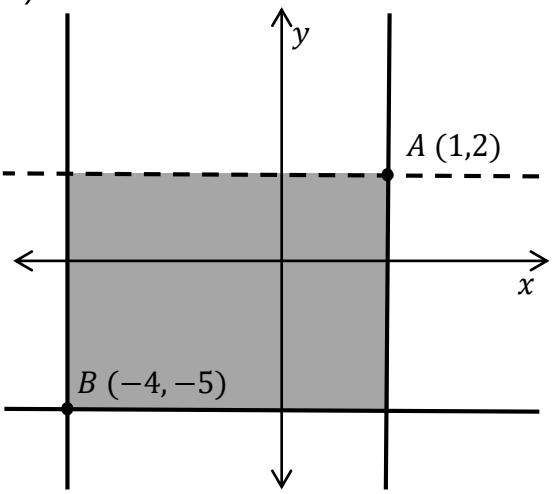
c)



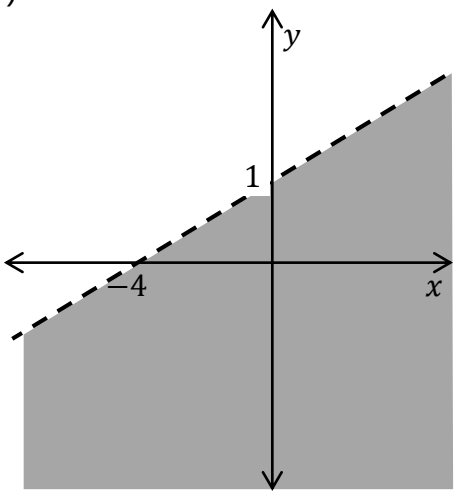
d)



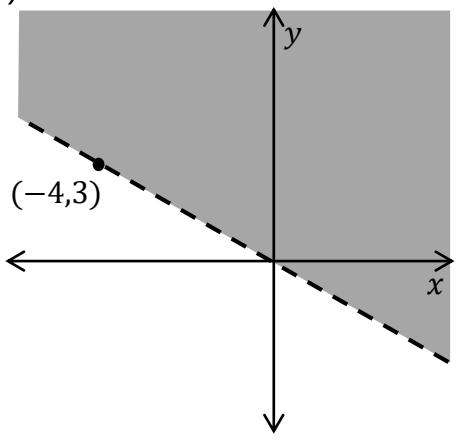
e)



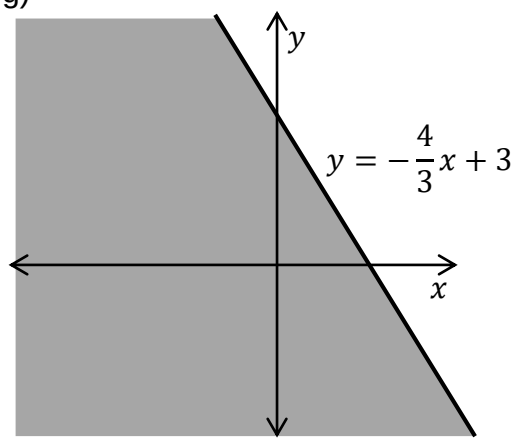
f)



f)



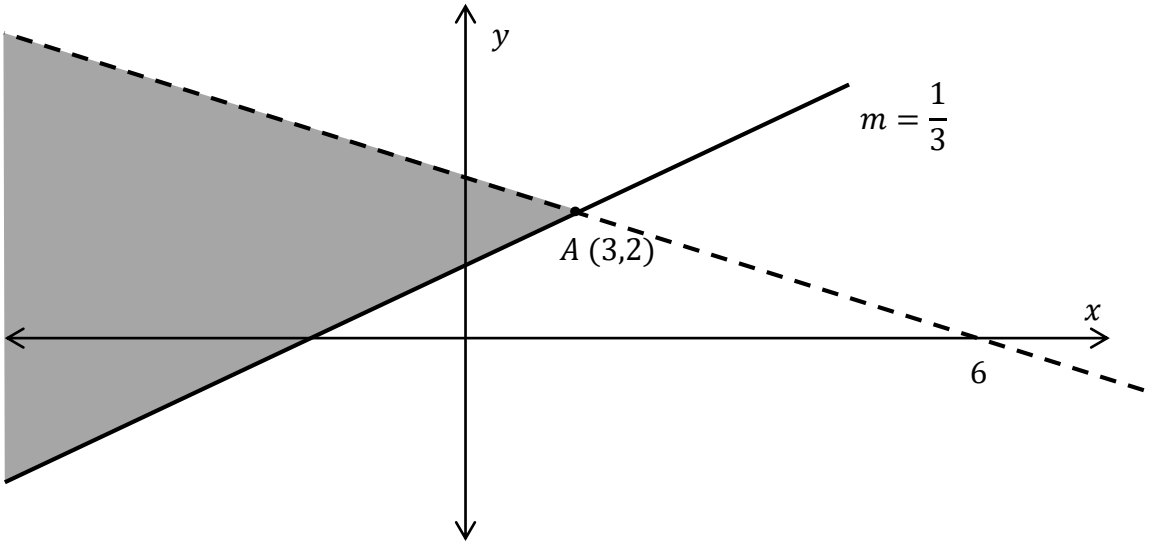
g)



3. Describe the shaded region using one or more appropriate inequalities.

Show all your working.

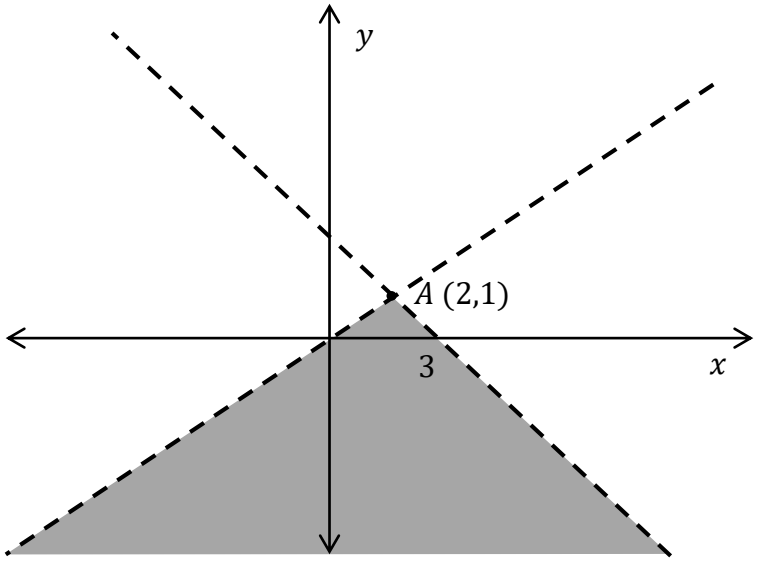
b)



4. Describe the shaded region using one or more appropriate inequalities.

Show all your working.

a)



5. Describe the shaded region using one or more appropriate inequalities.

Show all your working.