Homework – Chapter 9 Part I

1. Write the following as a set of values and an interval.

a) $x>-5$

b) $x\leq -10$

c) $-2\leq x<3$

d) $x<-1$ or $x\geq 4$
2. Solve:

a) $2\left(x+5\right)-4\geq 5(3x-2)$ b) $\frac{2}{3}\left(9x-12\right)<1-3(2x-5)$

c) $\frac{x+3}{4}\leq -\frac{2x-3}{5}$ d) $(2x+1)(3x-5)\leq 6(x+1)(x-1)$

e) $4\left(x+3\right)\left(x-1\right)>\left(2x-3\right)^{2}$
3. Are the following numbers part of the solution?
a) $x=5$ for $3x-5\leq 2x+1$

b) $x=-\frac{1}{3}$ for $2\left(x-4\right)>3x+2$

c) $x=-3$ for $x^{2}-5x+2\geq 0$

d) $x=-\frac{2}{3}$ for $3x^{2}-4x+5\leq 0$