Section 2-11 : Linear Inequalities

For problems 1 – 6 solve each of the following inequalities. Give the solution in both inequality and interval notations.

1. $4(z+2)-1>5-7(4-z)$

2. $\frac{1}{2}(3+4t)\le 6\left(\frac{1}{3}-\frac{1}{2}t\right)-\frac{1}{4}(2+10t)$

3. $-1<4x+2<10$

4. $8\le 3-5z<12$

5. $0\le 10w-15\le 23$

6. $2<\frac{1}{6}-\frac{1}{2}x\le 4$

7. If $0\le x<3$ determine *a* and *b* for the inequality : $a\le 4x+1<b$