**You must SHOW ALL WORK to receive full credit.**

**Simplify:**

1. $\left(3x^{3}+6x+9\right)+(2x^{2}-6x-4)$ 2. $\left(x^{2}-5x-6\right)-(5x^{2}-10x-6)$

3. $(3x-4)(3x+4)$ 4. $(x-9)(x+7)$

5. $(5x+4)(2x^{2}-3x+5)$

**Solve and graph.**

6. $7x+6<-3+10x$