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

**Simplify:**

1. $\left(7x^{3}-2x+1\right)-(2x^{2}-3x+4)$ 2. $(4x+2)(x-5)$

3. $(x-4)(x-8)$ 4. $(2x-1)(3x^{2}-4x+10)$

**Factor out the GCF.**

5. $13xy^{3}+39x^{2}y^{2}$ 6. $4x^{3}-12x^{2}+8x$

**Solve and graph.**

7. $4<x+6\leq 10$