**Factoring Polynomials Homework**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: ­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

*Factor the following polynomials.*

1. $12x+42y $ 2. $8x^{2}+10xy $
2. $40n^{6}+28n^{2}+16n$ 4. $24x^{8}y+9x^{4}y+12x^{3}y^{2}$
3. $32v^{3}-40$ 6. $16a^{2}-12a+12$
4. $10a^{2}b^{4}-20ab^{2}$ 8. $-4xy^{3}-28xy^{2}+8xy$