Practice 13.1

Name_____

Identify the greatest common factor.

1) $8x^3 + 10x^2 - 2x$

Factor the expression.

2) $8x^4 - 40x^2$

3) $4a^4b^2 - 8a^3b^3$

Factor by grouping.

4) $x^3 + 2x^2 + 5x + 10$

5) $4y^3 - 12y^2 + 5y - 15$

6) $ax - bx + ay - by$

Completely factor the polynomial.

7) $2x^3 + 6x^2 + 2x + 6$

8) $12x^3y - 3x^2y^2 + 48x^2y - 12xy^2$

Factor.

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

1) $2x$
2) $8x^2(x^2 - 5)$
3) $4a^3b^2(a - 2b)$
4) $(x^2 + 5)(x + 2)$
5) $(4y^2 + 5)(y - 3)$
6) $(x + y)(a - b)$
7) $2(x^2 + 1)(x + 3)$
8) $3xy(4x - y)(x + 4)$
9) $(x - 3)(x + 7)$