

Show all work and circle/box your simplified answers. If you do the problem incorrectly, or don't show sufficient work, you will be asked to rewrite the problem for credit. Students who turn assignments in late (or do not attempt a problem) forfeit their ability to rewrite those problems for credit.

Due at the start of next class (unless otherwise arranged with Professor MG).

- (1) Factor out the GCF: $9x - 15$
- (2) Factor out the GCF: $16x^2 + 20x - 4$
- (3) Factor out the GCF: $-5p^6q^3 - 10p^4q^4 + 25pq^7$
- (4) Factor out the GCF: $-10x^5y^3z - 6x^2y^2z^2 + 2x^2y$
- (5) Factor by grouping: $x^3 - 3x^2 + 4x - 12$
- (6) Factor by grouping: $90x^2 + 60x + 75x + 50$
- (7) Factor by grouping: $-2x^3 + 4x - 20 + 10x^2$
- (8) Factor by grouping: $x(y + 9) + 1(y + 9)$
- (9) Factor by grouping: $x^3 - 5x^2 + 3x - 15$
- (10) Factor by grouping: $x^2 + 3x - 6x - 18$