

Show all work and simplify all answers before circling/boxing them. If you do the problem incorrectly, or don't show sufficient work, you will be asked to rewrite the problem for full credit.

**Due next class.** Students who turn assignments in late (or do not attempt a problem) forfeit their ability to rewrite those problems for credit.

- (1) Simplify  $(x^2 + 4x - 6) + (7x - 5)$
- (2) Simplify  $(x^2 - 7x + 18) + (6x + 3)$
- (3) Simplify  $(8y^2 + 5y - 7) - (6y^2 - 16)$
- (4) Simplify  $(6a - 7b + 8c) - (-4a + 9b - 3c)$
- (5) Simplify  $(6a^2 - 7ab + 8b^2) - (8ab - 5b^2 - 4a^2b)$
- (6) Multiply (and simplify)  $(3w - 1)(4w + 3)$
- (7) Multiply (and simplify)  $(x^2 + x + 9)(x - 9)$
- (8) Multiply (and simplify)  $(x^3 - x^2 + 2x + 5)(x + 1)$
- (9) Multiply (and simplify)  $(x^2 - 4x + 6)(7x^2 - 5x + 4)$
- (10) Multiply (and simplify)  $(9x + 6y)^2$