① (a) $x'yz + xz$ Given
    $z[(x'y) + x]$ Distributive
    $z[(x'x) + (yx)]$ Contradiction
    $z(0 + yx)$ Identity
    $\boxed{xyz}$

(b) $xyz + x'yz + xy'z + (xyz')'$ Given
$xyz + x'yz + xy'z + (x'y'z)''$ De Morgan's
$xyz + x'yz + xy'z + x'y'z$ Involution
$z(xy + x'y + xy' + x'y')$ Distributive
$z[(x+x')(y+y')]$ Distributive
$\boxed{z}$ Complimentarity

(c) $abc + a'b + abc'$ Given
    $abc + abc' + a'b$ Communative
    $ab(c + c') + a'b$ Distributive
    $ab + a'b$ Complementarity
    $b(a + a')$ Distributive
    $\boxed{b}$ Complementarity

(d) $A(C + D'B) + A'B$ Given
    $\boxed{AC + AD'B + A'B}$ Distributive