

HW3a

1. Use DeMorgan's theorem to remove the complement outside the braces:
(a) $F = ((x' + w)y + wyz + x'z(x + y))'$, (b) $F = (x(y + y'(z + w)))'$.
2. Simplify the following expressions in (a) sum of products and (b) product of sums:
$$F(x, y, z) = xy' + y'z + xz + xyz'$$

For each problem, use Verilog to simulate the two logic functions before and after brace removal for function verification.