

### Answer on Question #44460, Engineering, Other

**Task:** Expand the following Boolean functions into their canonical form  $f(X, Y, Z) = XY + YZ' + XZ' + X'Y$ ?

**Answer:**

$$f(X, Y, Z) = XY + YZ' + XZ' + X'Y = (X + X')Y + YZ' + XZ' = Y(Z' + 1) + XZ' = Y + XZ'.$$