

NAME:

Honor Code:

KEY

Realize

$$F(a,b,c,d,e) = \sum m(0,1,2,19,29,30)$$

Using a 16-1 MUX with the control inputs  $a, b, c$  &  $d$ .

$$f = e'b'c'd'e' + a'b'c'd'e + a'b'c'de' + ab'c'de + abc'de' + abcde'$$

$$= a'b'c'd'(1) + a'b'c'd(e') + ab'c'd(e) + abcd'(e) + abcd(e')$$

$$+ ab'c'd'(0) + \dots (0)$$

