

15035 - HW 2 - EE 461

Q1
a)

```
module mult (q, sel, a, b);  
  output q;  
  
  input a, b, sel;  
  
  wire a, b, sel;  
  
  and a1(a, b, sel);  
  nand na1(a, b, sel);  
  or o1(a, b, sel);  
  xor x1(a, b, sel);  
  mux m1(a, b, sel);  
  mux m2(a, b, sel);  
  
end module.
```

b)

```
module mul (a, b, q, sel);  
  input a, b, sel;  
  output q;  
  
  assign q = sel ? a : b;  
  
end module;
```

(2)

