```
        lw      1       0       neg1        load in -1 to r1. If a bitmask gives us
                                                -1 that means there is no bit
        lw      2       0       mcand       load in the multiplicand at r2
        lw      3       0       mplier      load in the multipler at r3
        lw      4       0       last        load in what the last bitmask would be
        lw      5       0       one         load in the inital bit mask at r5
top     nand    6       5       3           apply the bitmask
        add     5       5       5           left shift the bit mask
        beq     6       1       1           If the mask result is the same number
                                                (All one's) then skip next step
        add     7       7       2           Add the current shifted multiplcand
                                                into the result
        beq     4       5       end         if the bitmask is at the last value
                                                then end
        add     2       2       2           left shift the multiplicand
        beq     0       0       top         if we get to this line then go to
                                                the begining
end     halt
last    .fill   1048576
mcand   .fill   29562
mplier  .fill   11834
one     .fill   1
neg1    .fill   -1
```