1) S/M =-23, 1'sC = -8, 2'sC = -9, neg.bitstr = 010111
2) S/M = 000000 and 100000, 1'sC = 000000 and 111111, 2'sC = 000000 and 000000.
3) S/M = 111111 = -62_{10} , 1'sC = 100000 = $-62_{10,}$ 2'sC = 100001 = -62_{10}
4) Yes, because we have two negations happening so the sign changes.
5) = 73, no because it is unsigned everything is positive and no sign change occurs.
6) = 47
7) = -63
8) Signed magnitude => -13+18=5
9) 001100+010010=011110
10) 001101-011110=001101+(-011110)=001101+110011=101100=-(010001)=-17
11) -011001-000111=-100000
12) 011000+001010=1+100000=34 overflow on 32bit!