

Convert the following decimal numbers to 7-bit binary numbers (including sign), using 2's complement to represent negative numbers.

a) -64

64 32 16 8 4 2 1
1 1 0 0 0 0 0 0

11000000

b) -43

64 32 16 8 4 2 1
1 1 0 1 0 1 0 1

11010101

c) 63

00111111

00111111

Convert the following decimal numbers to 7-bit binary numbers (including sign), using 1's complement to represent negative numbers.

d) -63

0-111111
↓
10000000

10000000

e) -43

0-101011
↓
10010100

10010100

f) 60

00111100
↓
11000011

11000011