

Subject:
Date:

$$2^7 + 2^6 + 8 + 1$$

-54

$$11001001 \text{ (binary)} = 201 \text{ (unsigned)}$$

(الف)

(ب)

-4

1's comp.

2's comp.

-55

-201

10110110

10110111

↓

↓

-4

$$(1100.1001)_2 \rightarrow (12.5625)_{10}$$

(ج)

+6

$$1 \times 2^3 + 1 \times 2^2 = 8 + 4 = 12$$

$$(0.1001)_2 \rightarrow 1 \times 2^{-1} + 1 \times 2^{-4} = 0.5 + 0.0625 = 0.5625$$

$$(1100.1001)_2 \rightarrow (-3.4375)_{10}$$

(د)

$$-2^3 + 4.5625 = -8 + 4.5625 = -3.4375$$

+6