a)

$$\frac{1}{32} \quad \frac{1}{16} \quad \frac{1}{8} \quad \frac{0}{4} \quad \frac{0}{2} \quad \frac{1}{1}$$

| 0b111001 |

$57 / 2 = 28 \quad R=1$
$28 / 2 = 14 \quad R=0$
$14 / 2 = 7 \quad R=0$
$7 / 2 = 3 \quad R=1$
$3 / 2 = 1 \quad R=1$
$1 / 2 = 0 \quad R=1$

111001

b)

$7098 / 2 = 3549 \quad R=0$
$3549 / 2 = 1774 \quad R=1$
$1774 / 2 = 887 \quad R=0$
$887 / 2 = 443 \quad R=1$
$443 / 2 = 221 \quad R=1$
$221 / 2 = 110 \quad R=1$
$110 / 2 = 55 \quad R=0$
$55 / 2 = 27 \quad R=1$
$27 / 2 = 13 \quad R=1$
$13 / 2 = 6 \quad R=1$
$6 / 2 = 3 \quad R=0$
$3 / 2 = 1 \quad R=1$
$1 / 2 = 0 \quad R=1$

$\underline{0001} \quad \underline{1011} \quad \underline{1011} \underline{1010}$

$1110 \qquad 0100 \quad 0100 \qquad 0101$

$+ 1110 \quad 0100 \quad 0100 \qquad 0110$

| 0x E446 |

c)

0b 110 - 1000

$$8 + 32 + 64 = \boxed{104}$$

d) 0x 1B7

0001   1011   0111

$$-(2^0 + 2^1 + 2^2 + 2^4 + 2^5 + 2^7 + 2^8) = \boxed{-183}$$

e) 0b 0110_0011_1000

$$2^3 + 2^4 + 2^5 + 2^9 + 2^{10} = \boxed{1592}$$

f) 0x89

1000 - 1001

$$2^0 + 2^3 - 2^7 = \boxed{-119}$$

g) 0b 1010_0110

$$2^1 + 2^2 + 2^5 - 2^7 = \boxed{-90}$$

h) 0x 4A0

0100_1010_0000
1001 0000 111 1

0b 1101   1010   1111

i)

    1111
  + 0111 - 1000
    1001 - 1001
  0b 0001   0001

0x67

0110 - 0111

1001 - 1000
        +1
1001 - 1001

j)

1010   1111   0010
0101   0000   1101
+   1
0b 0101   0000 1110