

2a.

9

$$9-8=1$$

1001

$$8+1=9=0x9$$

14

$$14-8 \quad 6-4 \quad 2-2$$

1 1 1 0

$$8+4+2=14=0xE$$

42

$$42-32$$

$$10-8$$

1 0 1 0 1 0

$$32+8+2=42$$

10 10 10

2 10

$$2 \quad A = 0x2A$$

96

$$96-64$$

1 1 0 0 0 0 0

$$64+32=96$$

110 0000

$$6 \quad 6 = 0x60$$

2b.

1110

$$8+4+2=14=0xE$$

11010

$$16+8+2=26$$

1 1010

$$1 \quad 10 \quad A = 0x1A$$

101010

$$32+8+2=42$$

10 1010

$$2 \quad 10 \quad A = 0x2A$$

1110100

$$64+32+16+4=116$$

111 0100

$$7 \quad 4 = 0x74$$