

1. 246_8 converts to $1010\ 0110_2$. This converts to $A6_{16}$

1. $A6$ or $A6_{16}$

2. Add the digits from right to left as follows

$$\begin{aligned} 8 + C &= 14_{16} \\ 5 + B + 1 &= 11_{16} \\ 3 + 8 + 1 &= C_{16} \\ A + E &= 18_{16} \\ B + A + 1 &= 16_{16} \end{aligned}$$

2. $168C14$ or
 $168C14_{16}$

3. The table below gives the values of the variables

K	C	S
0	0	1
1	1	-1
2	0	1
3	1	-1
4	0	1
5	1	-1
6	0	1
7	1	-1
8	0	1

3. 0

4. $f(6) = f(5) + 6 = 15 + 6 = 21$
 $f(5) = f(4) + 5 = 10 + 5 = 15$
 $f(4) = f(3) + 4 = 6 + 4 = 10$
 $f(3) = 2 * 3 = 6$

4. 21

5. $f(7,4) = 4 - f(2,6) = 4 - 7 = -3$
 $f(2,6) = 2 - f(0,5) = 2 - (-5) = 7$
 $f(0,5) = 0 - 5 = -5$

5. -3