Binary, Oct, Hex Quiz Work

Wednesday, April 22, 2020   11:14 AM

1. A=11   B=12   C=13   D=14

$$14 \times 16^0 = 14$$
$$13 \times 16^1 = 208$$
$$12 \times 16^2 = 3072$$
$$11 \times 16^3 = 45056$$

$$45056 + 3072 + 208 + 14 = \boxed{48350}$$

2.

1	2	3	4	5	6	7	8	9	Hex
0000	0001	0010	0011	0100	0101	0110	0111	1000	1001 bin
0	1	2	3	4	5	6	7	10	11 oct

A	B	C	D	E	F
1010	1011	1100	1101	1110	1111
12	13	14	15	16	17

$$\boxed{1010\ 1011\ 1100\ 1101}$$

3. $\boxed{12\ 13\ 14\ 15}$

4. $\boxed{9FA51}$

5. $\boxed{4571}$

6. $12459/16 = 778 \text{ R } 11$

$778/16 = 48 \text{ R } 10$

$48/16 = 3 \text{ R } 0$

$3/16 = 0 \text{ R } 3$

$\boxed{30AB}$

7. $1342/2 = 671 \text{ R } 0$

$671/2 = 335 \text{ R } 1$

$335/2 = 167 \text{ R } 1$

$167/2 = 83 \text{ R } 1$

$83/2 = 41 \text{ R } 1$

$41/2$