

1) & 2)

Decimal	Hexadecimal
0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	A
11	B
12	C
13	D
14	E
15	F
16	10
17	11
18	12
19	13
20	14

3)

$$\begin{aligned} 3F7A7(16) \text{ a } (10) &= 3 * 16^4 + 15 * 16^3 + 7 * 16^2 + 10 * 16^1 + 7 * 16^0 \\ &= 3 * 65.536 + 15 * 4.096 + 7 * 256 + 10 * 16 + 7 * 1 \\ &= 196.608 + 61.440 + 1.792 + 160 + 7 \\ &= 260.007 \end{aligned}$$

$$3F7A7(16) = 260.007(10)$$

$$\begin{aligned} 678EF(16) \text{ a } (10) &= 6 * 16^4 + 7 * 16^3 + 8 * 16^2 + 14 * 16^1 + 15 * 16^0 \\ &= 6 * 65.536 + 7 * 4.096 + 8 * 256 + 14 * 16 + 15 * 1 \\ &= 393.216 + 28.672 + 2.048 + 224 + 15 \\ &= 424.175 \end{aligned}$$

$$678EF(16) = 424.175(10)$$

$$\begin{aligned} 679AB(16) \text{ a } (10) &= 6 * 16^4 + 7 * 16^3 + 9 * 16^2 + 10 * 16^1 + 11 * 16^0 \\ &= 6 * 65.536 + 7 * 4.096 + 9 * 256 + 10 * 16 + 11 * 1 \\ &= 393.216 + 28.672 + 2.304 + 160 + 11 \\ &= 424.363 \end{aligned}$$

$$678EF(16) = 424.363(10)$$

$$\begin{aligned} 10C13(16) \text{ a } (10) &= 1 * 16^4 + 0 * 16^3 + 12 * 16^2 + 1 * 16^1 + 3 * 16^0 \\ &= 1 * 65.536 + 0 * 4.096 + 12 * 256 + 1 * 16 + 3 * 1 \\ &= 65.536 + 0 + 3.072 + 16 + 3 \\ &= 68.627 \end{aligned}$$

$$10C13(16) = 68.627(10)$$

$$\begin{aligned} ABCDE(16) \text{ a } (10) &= 10 * 16^4 + 11 * 16^3 + 12 * 16^2 + 13 * 16^1 + 14 * 16^0 \\ &= 10 * 65.536 + 11 * 4.096 + 12 * 256 + 13 * 16 + 14 * 1 \\ &= 655.360 + 45.056 + 3.072 + 208 + 14 \\ &= 703.710 \end{aligned}$$

$$ABCDE(16) = 703.710(10)$$