|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Question 1** | | | | | | | | |  |
| ***256*** | **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |  |
|  |  |  |  |  |  |  |  |  | ***Carries*** |
|  | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |  |
|  | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | **+** |
|  |  |  |  |  |  |  |  |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Question 2** | | | | | | | | |  |
| ***256*** | **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |  |
|  |  |  |  |  |  |  |  |  | ***Carries*** |
|  | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 |  |
|  | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | **+** |
|  |  |  |  |  |  |  |  |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Question 3** | | | | | | | | |  |
| ***256*** | **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |  |
|  |  |  |  |  |  |  |  |  | ***Carries*** |
|  | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 |  |
|  | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | **+** |
|  |  |  |  |  |  |  |  |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Question 4** | | | | | | | | |  |
| ***256*** | **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |  |
|  |  |  |  |  |  |  |  |  | ***Carries*** |
|  | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 |  |
|  | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | **+** |
|  |  |  |  |  |  |  |  |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Question 5** | | | | | | | | |  |
| ***256*** | **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |  |
|  |  |  |  |  |  |  |  |  | ***Carries*** |
|  | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 |  |
|  | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | **+** |
|  |  |  |  |  |  |  |  |  |  |

**Explain the result in Questions 4 and 5**

|  |
| --- |
|  |

**Hexadecimal Numbers**

**Convert the following Binary Numbers into Hexadecimal Notation**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Question 1** | | | | | | | | |  |
| ***256*** | **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |  |
|  |  |  |  |  |  |  |  |  |  |
|  | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 |  |
|  |  |  |  |  |  |  |  |  |  |
| HEX |  | | | |  | | | |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Question 2** | | | | | | | | |  |
| ***256*** | **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |  |
|  |  |  |  |  |  |  |  |  |  |
|  | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  |
|  |  |  |  |  |  |  |  |  |  |
| HEX |  | | | |  | | | |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Question 3** | | | | | | | | |  |
| ***256*** | **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |  |
|  |  |  |  |  |  |  |  |  |  |
|  | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 |  |
|  |  |  |  |  |  |  |  |  |  |
| HEX |  | | | |  | | | |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Question 4** | | | | | | | | |  |
| ***256*** | **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |  |
|  |  |  |  |  |  |  |  |  |  |
|  | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 |  |
|  |  |  |  |  |  |  |  |  |  |
| HEX |  | | | |  | | | |  |

**Convert the Following Decimal Numbers into binary and then Hexadecimal.**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Question 1 Convert the Number 120 to Hex** | | | | | | | | |  |
| ***256*** | **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| HEX |  | | | |  | | | |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Question 2 Convert the Number 250 to Hex** | | | | | | | | |  |
| ***256*** | **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| HEX |  | | | |  | | | |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Question 3 Convert the Number 54 to Hex** | | | | | | | | |  |
| ***256*** | **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| HEX |  | | | |  | | | |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Question 4 Convert the Number 68 to Hex** | | | | | | | | |  |
| ***256*** | **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| HEX |  | | | |  | | | |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Question 5 Convert the Number 99 to Hex** | | | | | | | | |  |
| ***256*** | **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| HEX |  | | | |  | | | |  |