# 01: Binary Conversion

### Binary to Decimal

|  |  |  |  |  |  |  |  |
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| **Question 1** | | | | | | | |
| **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |
| 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 |
| **Working** | | | | | | **Answer** | |
|  | | | | | |  | |

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| **Question 2** | | | | | | | |
| **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |
| 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 |
| **Working** | | | | | | **Answer** | |
|  | | | | | |  | |

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| **Question 3** | | | | | | | |
| **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |
| 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| **Working** | | | | | | **Answer** | |
|  | | | | | |  | |

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| **Question 4** | | | | | | | |
| **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |
| 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **Working** | | | | | | **Answer** | |
|  | | | | | |  | |

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| **Question 5** | | | | | | | |
| **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |
| 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| **Working** | | | | | | **Answer** | |
|  | | | | | |  | |

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| **Question 6** | | | | | | | |
| **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **Working** | | | | | | **Answer** | |
|  | | | | | |  | |

### Decimal to Binary

1) 19 = 10011

2) 33 = 100001

3) 77 = 1001101

4) 142 = 10001110

5) 211 = 11010011

6) 254 = 11111110

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| **Question 1** | | | | | | | |
| **Decimal** | | **Working** | | | | | |
| 19 | |  | | | | | |
| **Answer** | | | | | | | |
| **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |
|  |  |  |  |  |  |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Question 2** | | | | | | | |
| **Decimal** | | **Working** | | | | | |
| 33 | |  | | | | | |
| **Answer** | | | | | | | |
| **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |
|  |  |  |  |  |  |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Question 3** | | | | | | | |
| **Decimal** | | **Working** | | | | | |
| 77 | |  | | | | | |
| **Answer** | | | | | | | |
| **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |
|  |  |  |  |  |  |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Question 4** | | | | | | | |
| **Decimal** | | **Working** | | | | | |
| 142 | |  | | | | | |
| **Answer** | | | | | | | |
| **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |
|  |  |  |  |  |  |  |  |

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| **Question 5** | | | | | | | |
| **Decimal** | | **Working** | | | | | |
| 211 | |  | | | | | |
| **Answer** | | | | | | | |
| **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |
|  |  |  |  |  |  |  |  |

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| **Question 6** | | | | | | | |
| **Decimal** | | **Working** | | | | | |
| 254 | |  | | | | | |
| **Answer** | | | | | | | |
| **128** | **64** | **32** | **16** | **8** | **4** | **2** | **1** |
|  |  |  |  |  |  |  |  |