Contents

[Bit Conversion - Questions 2](#_Toc75181800)

[Bit Conversion - Answers 5](#_Toc75181801)

### Bit Conversion - Questions

1. Convert the following from its respective bases

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Question | Bin | Oct | Dec | Hex |
| 1102 |  |  |  |  |
| 110112 |  |  |  |  |
| 1010012 |  |  |  |  |
| 1011012 |  |  |  |  |
| 1768 |  |  |  |  |
| 228 |  |  |  |  |
| 4418 |  |  |  |  |
| 2448 |  |  |  |  |
| 5010 |  |  |  |  |
| 66610 |  |  |  |  |
| 33310 |  |  |  |  |
| 43410 |  |  |  |  |
| 4418 |  |  |  |  |
| 0xAB16 |  |  |  |  |
| 0x12316 |  |  |  |  |
| 0x2F16 |  |  |  |  |
| 0x1316 |  |  |  |  |
| 0xA2C16 |  |  |  |  |
| 0xFFF16 |  |  |  |  |

1. Operations

|  |  |
| --- | --- |
| 1011012+ 1110112 |  |
| 1100002- 001112 |  |
| 1111112\* 1012 |  |
| 1111112/1112 |  |
| 0x12316+0xABC16 |  |
| 0xABC16-0x89116 |  |
| 0xB16\*0x216 |  |
| 0x1416/0xA16 |  |

1. Convert to Base 10 OR evaluate the expressions

|  |  |
| --- | --- |
| 35.26 | Base 10 = |
| 11.38 | Base 10 = |
| 11.529 | Base 10 = |
| 33.38-11.18 |  |
| 111.1112 | Base 10 = |

### Bit Conversion - Answers

1. Convert the following from its respective bases

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Question | Bin | Oct | Dec | Hex |
| 1102 | 110 | 6 | 6 | 6 |
| 110112 | 11011 | 33 | 27 | 1B |
| 1010012 | 101001 | 51 | 41 | 29 |
| 1011012 | 101101 | 55 | 25 | 2D |
| 1768 | 1111110 | 176 | 126 | 7E |
| 228 | 10010 | 22 | 18 | 12 |
| 4418 | 100100001 | 441 | 289 | 121 |
| 2448 | 10100100 | 244 | 164 | A4 |
| 5010 | 110010 | 62 | 50 | 32 |
| 66610 | 1010011010 | 1232 | 666 | 29A |
| 33310 | 101001101 | 515 | 333 | 14D |
| 43410 | 110110010 | 662 | 434 | 1B2 |
| 4418 | 100100001 | 441 | 289 | 121 |
| 0xAB16 | 10101011 | 253 | 171 | 0xAB |
| 0x12316 | 100100011 | 443 | 291 | 0x123 |
| 0x2F16 | 101111 | 57 | 47 | 0x2D |
| 0x1316 | 10011 | 23 | 19 | 0x13 |
| 0xA2C16 | 101000101100 | 5054 | 2604 | 0xA2C |
| 0xFFF16 | 111111111111 | 7777 | 4095 | 0xFFF |

1. Operations

|  |  |
| --- | --- |
| 1011012+ 1110112 | 10010002 |
| 1100002- 001112 | 1010012 |
| 1111112\* 1012 | 1001110112 |
| 1111112/1112 | 10012 |
| 0x12316+0xABC16 | 0xBDF16 |
| 0xABC16-0x89116 | 0x22B16 |
| 0xB16\*0x216 | 0x1616 |
| 0x1416/0xA16 | 0x216 |

1. Convert to Base 10 OR evaluate the expressions

|  |  |
| --- | --- |
| 35.26 | Base 10 = 24/3 |
| 11.38 | Base 10 = 2/3 |
| 11.529 | Base 10 = 57/81 |
| 33.38-11.18 | 22.28 |
| 111.1112 | Base 10 = 14/8 |