

Number System Conversion

Name: _____

1. Convert 7639 from base 16 to binary 1. _____
2. Convert 86 from decimal to binary 2. _____
3. Convert 13 from base 8 to binary 3. _____
4. Convert 1010 1010 0100 0011 from base 2 to hexadecimal 4. _____
5. Convert 0110 1101 from binary to base 10 5. _____
6. Convert 0110 0101 1000 0000 from base 2 to hexadecimal 6. _____
7. Convert 46 from base 8 to binary 7. _____
8. Convert 1110 0110 1011 0001 from binary to base 16 8. _____
9. Convert 0111 1100 1010 1111 from base 2 to hexadecimal 9. _____
10. Convert 12 from base 8 to binary 10. _____

Key 1

- | | | |
|---|--------------|--|
| 1. Convert 7639 from base 16 to binary | Your answer: | Correct answer: 0111 0110
0011 1001 |
| 2. Convert 86 from decimal to binary | Your answer: | Correct answer: 0101 0110 |
| 3. Convert 13 from base 8 to binary | Your answer: | Correct answer: 001 011 |
| 4. Convert 1010 1010 0100 0011 from base 2 to hexadecimal | Your answer: | Correct answer: aa43 |
| 5. Convert 0110 1101 from binary to base 10 | Your answer: | Correct answer: 109 |
| 6. Convert 0110 0101 1000 0000 from base 2 to hexadecimal | Your answer: | Correct answer: 6580 |
| 7. Convert 46 from base 8 to binary | Your answer: | Correct answer: 100 110 |
| 8. Convert 1110 0110 1011 0001 from binary to base 16 | Your answer: | Correct answer: e6b1 |
| 9. Convert 0111 1100 1010 1111 from base 2 to hexadecimal | Your answer: | Correct answer: 7caf |
| 10. Convert 12 from base 8 to binary | Your answer: | Correct answer: 001 010 |

1. Convert 011 001 from base 2 to octal 1. _____
2. Convert 147 from base 10 to binary 2. _____
3. Convert 0010 0101 1001 0100 from base 2 to hexadecimal 3. _____
4. Convert 010 110 001 from base 2 to octal 4. _____
5. Convert 1110 0010 0110 from base 2 to base 16 5. _____
6. Convert 0101 1010 from binary to base 10 6. _____
7. Convert 1011 1010 1100 1010 from binary to hexadecimal 7. _____
8. Convert 160 from decimal to base 2 8. _____
9. Convert 19 from decimal to base 2 9. _____
10. Convert 110 010 100 from base 2 to base 8 10. _____

Key2

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|---|--------------|------------------------------|
| 1. Convert 011 001 from base 2 to octal | Your answer: | Correct answer: 31 |
| 2. Convert 147 from base 10 to binary | Your answer: | Correct answer: 1001
0011 |
| 3. Convert 0010 0101 1001 0100 from base 2 to hexadecimal | Your answer: | Correct answer: 2594 |
| 4. Convert 010 110 001 from base 2 to octal | Your answer: | Correct answer: 261 |
| 5. Convert 1110 0010 0110 from base 2 to base 16 | Your answer: | Correct answer: e26 |
| 6. Convert 0101 1010 from binary to base 10 | Your answer: | Correct answer: 90 |
| 7. Convert 1011 1010 1100 1010 from binary to hexadecimal | Your answer: | Correct answer: baca |
| 8. Convert 160 from decimal to base 2 | Your answer: | Correct answer: 1010
0000 |
| 9. Convert 19 from decimal to base 2 | Your answer: | Correct answer: 0001
0011 |
| 10. Convert 110 010 100 from base 2 to base 8 | Your answer: | Correct answer: 624 |

Number System Conversion

Name: _____

1. Convert 191 from decimal to binary 1. _____
2. Convert 001 001 010 from base 2 to base 8 2. _____
3. Convert 32b0 from base 16 to binary 3. _____
4. Convert 34ba from base 16 to base 2 4. _____
5. Convert 0 from base 8 to binary 5. _____
6. Convert 1110 0001 from binary to base 10 6. _____
7. Convert 195 from decimal to binary 7. _____
8. Convert 1010 0110 1001 0001 from binary to hexadecimal 8. _____
9. Convert 1110 1100 0101 1101 from base 2 to hexadecimal 9. _____
10. Convert 0101 1000 1110 0000 from base 2 to base 16 10. _____

Key 3

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|---|--------------|--|
| 1. Convert 191 from decimal to binary | Your answer: | Correct answer: 1011 1111 |
| 2. Convert 001 001 010 from base 2 to base 8 | Your answer: | Correct answer: 112 |
| 3. Convert 32b0 from base 16 to binary | Your answer: | Correct answer: 0011 0010
1011 0000 |
| 4. Convert 34ba from base 16 to base 2 | Your answer: | Correct answer: 0011 0100
1011 1010 |
| 5. Convert 0 from base 8 to binary | Your answer: | Correct answer: 000 |
| 6. Convert 1110 0001 from binary to base 10 | Your answer: | Correct answer: 225 |
| 7. Convert 195 from decimal to binary | Your answer: | Correct answer: 1100 0011 |
| 8. Convert 1010 0110 1001 0001 from binary to hexadecimal | Your answer: | Correct answer: a691 |
| 9. Convert 1110 1100 0101 1101 from base 2 to hexadecimal | Your answer: | Correct answer: ec5d |
| 10. Convert 0101 1000 1110 0000 from base 2 to base 16 | Your answer: | Correct answer: 58e0 |

Number System Conversion

Name: _____

1. Convert 100 000 011 from base 2 to octal 1. _____
2. Convert 36 from base 8 to binary 2. _____
3. Convert 1000 1110 1100 0100 from binary to hexadecimal 3. _____
4. Convert 22a2 from hexadecimal to binary 4. _____
5. Convert a3cf from base 16 to base 2 5. _____
6. Convert 77 from base 8 to binary 6. _____
7. Convert 230 from base 10 to binary 7. _____
8. Convert d440 from hexadecimal to binary 8. _____
9. Convert 105 from decimal to base 2 9. _____
10. Convert 56 from octal to base 2 10. _____

Key 4

- | | | |
|---|--------------|--|
| 1. Convert 100 000 011 from base 2 to octal | Your answer: | Correct answer: 403 |
| 2. Convert 36 from base 8 to binary | Your answer: | Correct answer: 011 110 |
| 3. Convert 1000 1110 1100 0100 from binary to hexadecimal | Your answer: | Correct answer: 8ec4 |
| 4. Convert 22a2 from hexadecimal to binary | Your answer: | Correct answer: 0010 0010
1010 0010 |
| 5. Convert a3cf from base 16 to base 2 | Your answer: | Correct answer: 1010 0011
1100 1111 |
| 6. Convert 77 from base 8 to binary | Your answer: | Correct answer: 111 111 |
| 7. Convert 230 from base 10 to binary | Your answer: | Correct answer: 1110 0110 |
| 8. Convert d440 from hexadecimal to binary | Your answer: | Correct answer: 1101 0100
0100 0000 |
| 9. Convert 105 from decimal to base 2 | Your answer: | Correct answer: 0110 1001 |
| 10. Convert 56 from octal to base 2 | Your answer: | Correct answer: 101 110 |

1. Convert 1101 1000 0011 0111 from binary to base 16 1. _____
2. Convert 1011 1110 1000 1010 from binary to hexadecimal 2. _____
3. Convert a926 from hexadecimal to binary 3. _____
4. Convert cae7 from base 16 to binary 4. _____
5. Convert 687d from base 16 to base 2 5. _____
6. Convert 6 from decimal to binary 6. _____
7. Convert 110 011 100 from binary to base 8 7. _____
8. Convert 110 110 100 from binary to octal 8. _____
9. Convert 168 from base 10 to binary 9. _____
10. Convert 100 101 101 from base 2 to octal 10. _____

Key 5

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|---|--------------|-------------------------------------|
| 1. Convert 1101 1000 0011 0111 from binary to base 16 | Your answer: | Correct answer: d837 |
| 2. Convert 1011 1110 1000 1010 from binary to hexadecimal | Your answer: | Correct answer: be8a |
| 3. Convert a926 from hexadecimal to binary | Your answer: | Correct answer: 1010 1001 0010 0110 |
| 4. Convert cae7 from base 16 to binary | Your answer: | Correct answer: 1100 1010 1110 0111 |
| 5. Convert 687d from base 16 to base 2 | Your answer: | Correct answer: 0110 1000 0111 1101 |
| 6. Convert 6 from decimal to binary | Your answer: | Correct answer: 0110 |
| 7. Convert 110 011 100 from binary to base 8 | Your answer: | Correct answer: 634 |
| 8. Convert 110 110 100 from binary to octal | Your answer: | Correct answer: 664 |
| 9. Convert 168 from base 10 to binary | Your answer: | Correct answer: 1010 1000 |
| 10. Convert 100 101 101 from base 2 to octal | Your answer: | Correct answer: 455 |

Number System Conversion

Name: _____

1. Convert 110 110 001 from binary to base 8 1. _____
2. Convert 258c from hexadecimal to base 2 2. _____
3. Convert 111 000 011 from binary to base 8 3. _____
4. Convert 0110 1001 1000 0100 from base 2 to hexadecimal 4. _____
5. Convert 1100 1111 0001 0101 from binary to base 16 5. _____
6. Convert 0010 1001 from base 2 to base 10 6. _____
7. Convert 011 100 010 from binary to base 8 7. _____
8. Convert 1010 1100 1110 0111 from base 2 to hexadecimal 8. _____
9. Convert 0010 1101 0000 0100 from binary to hexadecimal 9. _____
10. Convert 98 from base 10 to binary 10. _____

Key 6

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|---|--------------|--|
| 1. Convert 110 110 001 from binary to base 8 | Your answer: | Correct answer: 661 |
| 2. Convert 258c from hexadecimal to base 2 | Your answer: | Correct answer: 0010 0101
1000 1100 |
| 3. Convert 111 000 011 from binary to base 8 | Your answer: | Correct answer: 703 |
| 4. Convert 0110 1001 1000 0100 from base 2 to hexadecimal | Your answer: | Correct answer: 6984 |
| 5. Convert 1100 1111 0001 0101 from binary to base 16 | Your answer: | Correct answer: cf15 |
| 6. Convert 0010 1001 from base 2 to base 10 | Your answer: | Correct answer: 41 |
| 7. Convert 011 100 010 from binary to base 8 | Your answer: | Correct answer: 342 |
| 8. Convert 1010 1100 1110 0111 from base 2 to hexadecimal | Your answer: | Correct answer: ace7 |
| 9. Convert 0010 1101 0000 0100 from binary to hexadecimal | Your answer: | Correct answer: 2d04 |
| 10. Convert 98 from base 10 to binary | Your answer: | Correct answer: 0110 0010 |

1. Convert 1110 1000 0000 0101 from base 2 to base 16 1. _____
2. Convert 3e55 from base 16 to binary 2. _____
3. Convert 1100 1010 from binary to base 10 3. _____
4. Convert 1010 0010 from base 2 to base 10 4. _____
5. Convert 66 from base 8 to binary 5. _____
6. Convert 000 from binary to base 8 6. _____
7. Convert 1011 1001 0011 1000 from binary to base 16 7. _____
8. Convert 134 from base 10 to binary 8. _____
9. Convert 111 011 101 from base 2 to octal 9. _____
10. Convert 1000 1001 0011 1111 from binary to base 16 10. _____

Key 7

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|--|--------------|-------------------------------------|
| 1. Convert 1110 1000 0000 0101 from base 2 to base 16 | Your answer: | Correct answer: e805 |
| 2. Convert 3e55 from base 16 to binary | Your answer: | Correct answer: 0011 1110 0101 0101 |
| 3. Convert 1100 1010 from binary to base 10 | Your answer: | Correct answer: 202 |
| 4. Convert 1010 0010 from base 2 to base 10 | Your answer: | Correct answer: 162 |
| 5. Convert 66 from base 8 to binary | Your answer: | Correct answer: 110 110 |
| 6. Convert 000 from binary to base 8 | Your answer: | Correct answer: 0 |
| 7. Convert 1011 1001 0011 1000 from binary to base 16 | Your answer: | Correct answer: b938 |
| 8. Convert 134 from base 10 to binary | Your answer: | Correct answer: 1000 0110 |
| 9. Convert 111 011 101 from base 2 to octal | Your answer: | Correct answer: 735 |
| 10. Convert 1000 1001 0011 1111 from binary to base 16 | Your answer: | Correct answer: 893f |

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|---|-----------|
| 1. Convert 50 from base 8 to base 2 | 1. _____ |
| 2. Convert 7d78 from base 16 to binary | 2. _____ |
| 3. Convert 9ef1 from hexadecimal to base 2 | 3. _____ |
| 4. Convert 169 from decimal to base 2 | 4. _____ |
| 5. Convert 1110 0101 0111 from base 2 to hexadecimal | 5. _____ |
| 6. Convert 73 from octal to base 2 | 6. _____ |
| 7. Convert 0011 1001 from binary to base 10 | 7. _____ |
| 8. Convert 0100 1110 0010 0110 from binary to hexadecimal | 8. _____ |
| 9. Convert 61 from base 10 to binary | 9. _____ |
| 10. Convert fa68 from hexadecimal to base 2 | 10. _____ |

Key 8

- | | | |
|---|------------------------|-------------------------------------|
| 1. Convert 50 from base 8 to base 2 | Your answer: | Correct answer: 101 000 |
| 2. Convert 7d78 from base 16 to binary | Your answer: 0111 1000 | Correct answer: 0111 1101 0111 1000 |
| 3. Convert 9ef1 from hexadecimal to base 2 | Your answer: 1111 0001 | Correct answer: 1001 1110 1111 0001 |
| 4. Convert 169 from decimal to base 2 | Your answer: | Correct answer: 1010 1001 |
| 5. Convert 1110 0101 0111 from base 2 to hexadecimal | Your answer: | Correct answer: e57 |
| 6. Convert 73 from octal to base 2 | Your answer: | Correct answer: 111 011 |
| 7. Convert 0011 1001 from binary to base 10 | Your answer: | Correct answer: 57 |
| 8. Convert 0100 1110 0010 0110 from binary to hexadecimal | Your answer: | Correct answer: 4e26 |
| 9. Convert 61 from base 10 to binary | Your answer: | Correct answer: 0011 1101 |
| 10. Convert fa68 from hexadecimal to base 2 | Your answer: 0110 1000 | Correct answer: 1111 1010 0110 1000 |

Number System Conversion

Name: _____

1. Convert 989b from hexadecimal to binary 1. _____
2. Convert 3736 from base 16 to base 2 2. _____
3. Convert 1101 1111 0000 1001 from base 2 to hexadecimal 3. _____
4. Convert 21 from octal to binary 4. _____
5. Convert 0001 0000 0111 1011 from binary to hexadecimal 5. _____
6. Convert cc1 from base 16 to binary 6. _____
7. Convert 84 from base 10 to base 2 7. _____
8. Convert 111 from decimal to base 2 8. _____
9. Convert 0001 1010 0001 1111 from binary to base 16 9. _____
10. Convert 0100 1000 from binary to decimal 10. _____

Key 9

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|---|-------------------------------------|--|
| 1. Convert 989b from hexadecimal to binary | Your answer: 1001 1000
1001 1011 | Correct answer: 1001 1000
1001 1011 |
| 2. Convert 3736 from base 16 to base 2 | Your answer: 0011 0111
0011 0110 | Correct answer: 0011 0111
0011 0110 |
| 3. Convert 1101 1111 0000 1001 from base 2 to hexadecimal | Your answer: df09 | Correct answer: df09 |
| 4. Convert 21 from octal to binary | Your answer: 010 001 | Correct answer: 010 001 |
| 5. Convert 0001 0000 0111 1011 from binary to hexadecimal | Your answer: 107b | Correct answer: 107b |
| 6. Convert cc1 from base 16 to binary | Your answer: 1100 1100
0001 | Correct answer: 1100 1100
0001 |
| 7. Convert 84 from base 10 to base 2 | Your answer: 0101 0100 | Correct answer: 0101 0100 |
| 8. Convert 111 from decimal to base 2 | Your answer: 0110 1111 | Correct answer: 0110 1111 |
| 9. Convert 0001 1010 0001 1111 from binary to base 16 | Your answer: 1a1f | Correct answer: 1a1f |
| 10. Convert 0100 1000 from binary to decimal | Your answer: 72 | Correct answer: 72 |

1. Convert 227 from decimal to base 2 1. _____
2. Convert 47 from base 8 to binary 2. _____
3. Convert 52 from decimal to base 2 3. _____
4. Convert 011 111 001 from binary to base 8 4. _____
5. Convert 6a67 from base 16 to base 2 5. _____
6. Convert 146 from base 10 to base 2 6. _____
7. Convert 80e3 from base 16 to base 2 7. _____
8. Convert 109 from decimal to base 2 8. _____
9. Convert 1111 1111 from binary to base 10 9. _____
10. Convert 111 100 010 from binary to base 8 10. _____

Key 10

1. Convert 227 from decimal to base 2 Your answer: Correct answer: 1110 0011
2. Convert 47 from base 8 to binary Your answer: Correct answer: 100 111
3. Convert 52 from decimal to base 2 Your answer: Correct answer: 0011 0100
4. Convert 011 111 001 from binary to base 8 Your answer: Correct answer: 371
5. Convert 6a67 from base 16 to base 2 Your answer: Correct answer: 0110 1010 0110 0111
6. Convert 146 from base 10 to base 2 Your answer: Correct answer: 1001 0010
7. Convert 80e3 from base 16 to base 2 Your answer: Correct answer: 1000 0000 1110 0011
8. Convert 109 from decimal to base 2 Your answer: Correct answer: 0110 1101
9. Convert 1111 1111 from binary to base 10 Your answer: Correct answer: 255
10. Convert 111 100 010 from binary to base 8 Your answer: Correct answer: 742

Number System Conversion

Name: _____

1. Convert 1001 0100 1110 0110 from binary to hexadecimal 1. _____
2. Convert 1000 1010 1000 0010 from base 2 to base 16 2. _____
3. Convert 110 011 from binary to octal 3. _____
4. Convert 8 from base 10 to base 2 4. _____
5. Convert 1001 1011 1000 from base 2 to base 16 5. _____
6. Convert 61 from base 10 to base 2 6. _____
7. Convert 164 from decimal to binary 7. _____
8. Convert 61 from octal to base 2 8. _____
9. Convert 20 from base 8 to base 2 9. _____
10. Convert 44 from base 8 to base 2 10. _____

Key 11

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|---|--------------|------------------------------|
| 1. Convert 1001 0100 1110 0110 from binary to hexadecimal | Your answer: | Correct answer: 94e6 |
| 2. Convert 1000 1010 1000 0010 from base 2 to base 16 | Your answer: | Correct answer: 8a82 |
| 3. Convert 110 011 from binary to octal | Your answer: | Correct answer: 63 |
| 4. Convert 8 from base 10 to base 2 | Your answer: | Correct answer: 1000 |
| 5. Convert 1001 1011 1000 from base 2 to base 16 | Your answer: | Correct answer: 9b8 |
| 6. Convert 61 from base 10 to base 2 | Your answer: | Correct answer: 0011
1101 |
| 7. Convert 164 from decimal to binary | Your answer: | Correct answer: 1010
0100 |
| 8. Convert 61 from octal to base 2 | Your answer: | Correct answer: 110 001 |
| 9. Convert 20 from base 8 to base 2 | Your answer: | Correct answer: 010 000 |
| 10. Convert 44 from base 8 to base 2 | Your answer: | Correct answer: 100 100 |