Computer Programming Name:
Computer Number Systems Worksheet #4 Period:

Show & label all work on additional paper and staple that paper to this worksheet.

Convert the following decimal (base 10) numbers to binary (base 2):

1. 32 =

2. 110 =

Convert the following decimal numbers to octal (base 8):

3. 21 =

4. 58 =

Convert the following decimal numbers to hexadecimal (base 16):

5. 1113 =

6. 1029 =

Convert the following binary numbers to decimals:

7. 11111110 =

8. 100111 =

Convert the following octal numbers to decimals:

9. 11 =

10. 266 =

Convert the following hexadecimal numbers to decimals:

11. A11=

12. 13 =

Add the following binary numbers. Set each problem up 'vertically' first.

13. 1000 + 11 =

14. 10101111 + 1011111 =

Add the following octal numbers. Set each problem up 'vertically' first.

15. 362 + 17 =

16. 177 + 17 =

Add the following hexadecimal numbers. Set each problem up 'vertically' first.

17. 288 + F2 =

18. EF0 + B9 =

Subtract the following binary numbers. Set each problem up 'vertically' first.

19. 1001 - 110 =

20. 110 - 11 =

Subtract the following octal numbers. Set each problem up 'vertically' first.

21. 23 - 7 =

22. 330 - 22 =

Subtract the following hexadecimal numbers. Set each problem up 'vertically' first.

23. B12 - 17 =

24. 98 - 12 =

Convert the following binary numbers **directly** to hexadecimal numbers.

25. 1011 1111 =

26. 1010 =

27. 11 0010 =

28. 110010101101 =

Convert the following hexadecimal numbers **directly** to binary numbers.

29. C3 =

30. F1F =