

Jan Polito

C 335

HW3

5. 273 136 68 34 17 8 4 2 1
1 0 0 0 1 0 0 0 1

answer: 100010001

1327 663 331 165 82 41 20 10 5 2 1
1 1 1 1 0 1 0 0 1 0 1

answer: 10100101111

31673 15836 7918 3959 1979 989 494 247 123 61 30 15 7 3 1
1 0 0 1 1 1 0 1 1 1 0 1 1 1 1

answer: 111101110111001

107 53 26 13 6 3 1
1 1 0 1 0 1 1

answer: 1101011

6. $\begin{array}{r} 233 \\ + 78 \\ \hline 311 \end{array}$ $\begin{array}{r} 1001 \\ + 97 \\ \hline 1100 \end{array}$ $\begin{array}{r} 173 \\ + 876 \\ \hline 1053 \end{array}$ $\begin{array}{r} 2780 \\ + 822 \\ \hline 3602 \end{array}$
99 50 2603

7. 111 55 27 13 6 3 1 Flip 1101111 add sign &
1 1 1 1 0 1 1 add 1 0010001 extend to 8 bits

answer: 10010001

59 29 14 7 3 1 Flip 111011 add sign &
1 1 0 1 1 1 add 1 000101 extend to 8 bits

answer: 11000101

105 52 26 13 6 3 1 Flip 1101001 add sign &
1 0 0 1 0 1 1 add 1 0010111 extend to 8 bits

answer: 10010111

31 15 7 3 1
1 1 1 1 1

answer: 00011111

127 63 31 15 7 3 1
1 1 1 1 1 1 1

answer: 01111111