$\frac{9}{10}$

Name ___Ismael Cortez___

Please use pencil and erase mistakes. Show your work and draw a box around your answers. 10 points, 2 each.

Convert the following decimal numbers to 8-bit binary:

47

128	64	32	16	8	4	2	1
0	0	1	0	1	1	1	1

$\boxed{47 = 0010\ 1111}$ ✓

29

128	64	32	16	8	4	2	1
0	0	0	1	1	1	0	1

$\boxed{29 = 0001\ 1101}$ ✓

54

128	64	32	16	8	4	2	1
0	0	1	1	0	1	1	0

$\boxed{54 = 0011\ 0110}$ ✓

Convert the following 8-bit unsigned binary numbers to decimal:

01001010

128	64	32	16	8	4	2	1
0	1	0	0	1	0	1	0

$64 + 8 + 2 = 64 + 10 = 74$

$\boxed{74}$ ✓

11100011

128	64	32	16	8	4	2	1
1	1	1	0	0	0	1	1

$128 + 64 + 32 + 2 + 1 = 128 + 96 + 3$

$128 + 99 = \boxed{227}$ ✓