

Chapter 6 Review Questions

Convert decimal 92 to binary

$$92/2 \ 0$$

$$46/2 \ 0$$

$$23/2 \ 1$$

$$11/2 \ 1$$

$$5/2 \ 1$$

$$2/2 \ 0$$

$$1/2 \ 1 \quad 92 \text{ (decimal)} = 1011100 \text{ (binary)}$$

Convert 110110 to decimal

$$110110$$

$$2^5 + 2^4 + 0 + 2^2 + 2^1 + 0$$

$$32 + 16 + 0 + 4 + 2 + 0$$

$$48 + 6$$

$$54 \quad 110110 \text{ (binary)} = 54 \text{ (decimal)}$$

Convert 92 to hexadecimal

$$92/16 \ 12$$

$$5 \quad 92 \text{ (decimal)} = C5 \text{ (hexadecimal)}$$

Convert 1A2B to decimal

$$1A2B$$

$$1 = 1 \quad A = 10 \quad 2 = 2 \quad B = 11$$

$$1(16^3) + 10(16^2) + 2(16^1) + 11(16^0)$$

$$4096 + 2560 + 32 + 11 = 6699$$

$$1A2B \text{ (hexadecimal)} = 6699 \text{ (decimal)}$$