1. Convert 3C4Fhex to decimal.

Integer.parseInt (“3C4F”, 16);

1. Convert 100011bin to decimal.

Integer.parseInt (“100011”, 2);

1. Convert 637oct to decimal.

Integer.parseInt (“637”, 8);

1. Is the following code legal? If not, why? int v = 04923;

no, 9 can’t be a digit in base 8

1. Is the following code legal? If not, why? int w = 0xAAFF;

yes

14-6

1. Convert 9A4Ehex to decimal.

Integer.parseInt (“9A4E”, 16);

1. Convert 1011011bin to decimal.

Integer.parseInt (“1011011”, 2);

1. Convert 6437oct to decimal.

Integer.parseInt (“6437”, 2);

1. Write code that will store 5C3Bhex in the integer variable *a*.

int a = 0x5C3B;

1. Write code that will store 3365oct in the integer variable *k*.

int k = 03365;

1. Convert 478dec to binary.

Integer.toBinaryString (478);

1. Convert 5678dec to hex.

Integer.toHexString (5678);

1. Convert 5678dec to octal.

Integer.toOctalString (5678);

1. Multiply 2C6hex times 3Fhex and give the answer in hex.

int i = Integer.toHexString(0x3F \* 0x2c6);

1. Add 3456oct and 745oct and give the answer in octal.

int i = Integer.toOctalString(03456 + 0745);

1. What is the decimal equivalent of Ahex?

10

1. What is the decimal equivalent of 8hex?

8

1. What is the base of the hex system?

16

1. How do you write 16dec in hex?

10

1. What is the base of the binary system?

2

1. Add these two binary numbers: 1111000 and 1001110.

1111000

1001110

11000110 = 128 + 64 + 4 + 2 = 198

1. Add these two binary numbers: 1000001 and 1100001

1000001

1100001

10100010

23. Explain the following “joke”: “There are only 10 types of people in the world…those

who understand binary and those who don’t.”

10 is 2 in binary

1. Suppose you have *String s* that represents a number that you know is expressed in a base given by *int b*. Write code that will convert this into an equivalent decimal based integer and store the result in *int i*.

int i = Integer.parseInt(s, b);

1. Show code that will convert 9322gf33 into *String s* that is the equivalent in base 28.

int i = Integer.toString(Integer.parseInt(“9322gf”, 33), 28);

1. Add 3FA6hex to E83Ahex and give the answer in hex.

int i = Integer.toHexString(0x3FA6 + E83A);

1. Multiply 7267oct times 4645oct and give the answer in octal.

int i = Integer.toOctalString(07267 + 04645);

1. Add 2376oct to 567oct and give the answer in octal.

int i = Integer.toOctalString(0237 + 0567);

1. Multiply 3Ehex times 5Bhex and give the answer in hex.

int i = Integer.toHexString(0x3E + 0x5B);

1. What is printed by *int i = 0b1001; System.out.println(i);* ?

9