

EE 2905

Dr. Johnson

Homework 3

1 – Evaluate each of the following expressions – given:

30pts

int8_t a;

a = 4;

int8_t b;

b = 100;

int8_t c;

c = 50;

Decimal value

b +

a / b

c % b

c * a

c >> 3

3 << a

2 – Evaluate each of the following expressions – given:

20pts

```
int8_t a;      a = 5;
int8_t b;      b = 4;
int8_t c;      c = 3;
uint8_t d;     d = 240;
uint8_t e;     e = 11;
uint8_t f;     f = 12;
```

Decimal value

$a * b / c | a \& b - c \% a + b$

$d - e \% f >> 3 \ll 3 \% 2$

3 – Evaluate each expression individually.

20pts

```
int a;    a = 4;    float c;    c = 1.1;    char e;    e = 'a';  
int b;    b = 5;    float d;    d = 2.2;    char f;    f = 'C';
```

Decimal value

--a - b + e++

b+++a-- - e

4 – evaluate each statement and indicate the type of the result.

15pts

```
int a;      float c;      char e;  
int b;      float d;      char f;  
int foo;    float boo;    char soo;  
a = 4;      c = 1.1;     e = 'a'  
b = 5;      d = 2.2;     f = 'C'
```

Value

Type

`boo = b - a;`

| |
|--|
| |
|--|

`foo = c / d;`

| |
|--|
| |
|--|

`boo = b % (int) c + 2;`

| |
|--|
| |
|--|

5 – Evaluate the following expressions individually.

15pts

```
int a;    int b;    int c;    int d;  
a = -3;   b = 6;    c = 1;    d = -2;
```

True/False

$a + b > c + d$

$a - 2 * b + b > c * 2 / 3$

$3 * b / 4 \% 5 \&\& b$