# Assignment Statements & BEDMAS

### Assignment Statements
Assignment statements are another way to change the value of a variable.

### Syntax
```
variablename = expression;
/* assigns the value of the right hand side to the variable
on the left; the values must be of a compatible type */
```

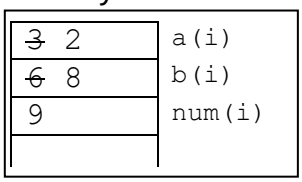
### Example

```
int a =3;
int b = 6;
int num;
num = a + b;
System.out.println(num);
a = 6 + 5 – num;
b = b + a;
System.out.println( a + a + num  +  "&" +  b);
```

Output

```
9
13&8
```

Memory




### BEDMAS
Recall the following order of operations

| | | |
|---|---|---|
| B | Brackets | ( ) |
| E | Exponent | no operator in Java (have to use a class method) |
| D | Division | / |
| | Modulo | % |
| M | Multiplication | * |
| A | Addition | + |
| S | Subtraction | - |

### Integer vs Real Division

| | | | |
|---|---|---|---|
| Integers: | 15 / 4 | = 3 | // 4 goes into 15, 3 times **evenly** |
| Real numbers: | 15.0 / 4.0 | = 3.75 | |

### Modulo Operator %

The modulo operator gives the remainder portion of integer division.

Examples
18 % 7 = 4  // 7 goes twice into 18 with a remainder of 4
10 %2  = 0
27 %10  = 7
14 % 3 = 2