Binary, ASCII, and Variables TEST | 2013

Create the following:

1. A variable named `testGrade` that could hold this test score: _____
2. A decimal number used to store a batting average: _____
3. A true/false variable called `correct` that stores the value `true`. _____
4. Assume a variable called `hits` is already created. Increase `hits` by two: _____

What are the values of the variables `num1`, `num2`, and `num 3` after each segment of code is executed

```
int num1 = 24;
int num2 = 8;
int num3 = num1 / num2;
num2 = num3 + 5;
num1 = 10;
```

num1	num2	num3

```
int num1 = 7;
int num2 = 2;
num1 = num1 - 1;
int num3 = num1 + num2 * 3;
```

num1	num2	num3

Convert from base 10 into base 2

77 _____

Convert from base 2 to base 10

1011 0010 _____

Convert from base 16 to base 10

3CE _____

Convert from base 2 to base 16

1010 1000 _____

Use the ASCII table to fill in the following blanks:

Character	Decimal Number	Binary Number
	105	

DIRECTIONS : Fill in each blank with the correct answer. Multiple answers are possible.

Which data type takes up 16 bits of memory? _____

Which data type takes up 32 bits of memory? _____

Which data type takes up 64 bits of memory? _____

DIRECTIONS : Fill in each blank with the correct answer/output. Assume each statement happens in order and that one statement may affect the next statement.

```
char pacMan = 'f';
int chunChun = 7;

float fVar = 32.22f;
double dVar = 123.456;
```

If any statements cause an error, write ***ERROR*** in the blank and treat the line that caused the error as if it did not exist.

```
int x = 128;                    out.println(x);    //1
x = 54;                         out.println(x);    //2
   out.println((int)pacMan + chunChun);            //3
char c = 97;                    out.println(c);    //4
double d = 10;                  out.println(d);    //5
d = 5.2;                        out.println(d);    //6
float f = 21.263;               out.println(f);    //7
char h = x + (int)f;            out.println(s);    //8
int z = 'A'+3;                  out.println(z);    //9
c = 'A'+3;                      out.println(c);    //10
double w = 'a'+5;               out.println(w);    //11
long u = 5412;                  out.println(u);    //12
w = f + 5;                      out.println(w);    //13
x = x % 5;                      out.println(x);    //14
w = 'A' * 2.0;                  out.println(w);    //15
f = w;                          out.println(f);    //16
u=9827437965;                   out.println(u);    //17
d = (int)97.5;                  out.println(d);    //18
z = w;                          out.println(z);    //19
```

What is the term when we use (int) to convert from a decimal to an integer? //20

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____