VARIABLES


CTRL
RESTORE
RUN STOP
SHIFT LOCK
RETURN
SHIFT
SHIFT
CLR HOME
INST DEL
f 1
f 3
f 5
f 7

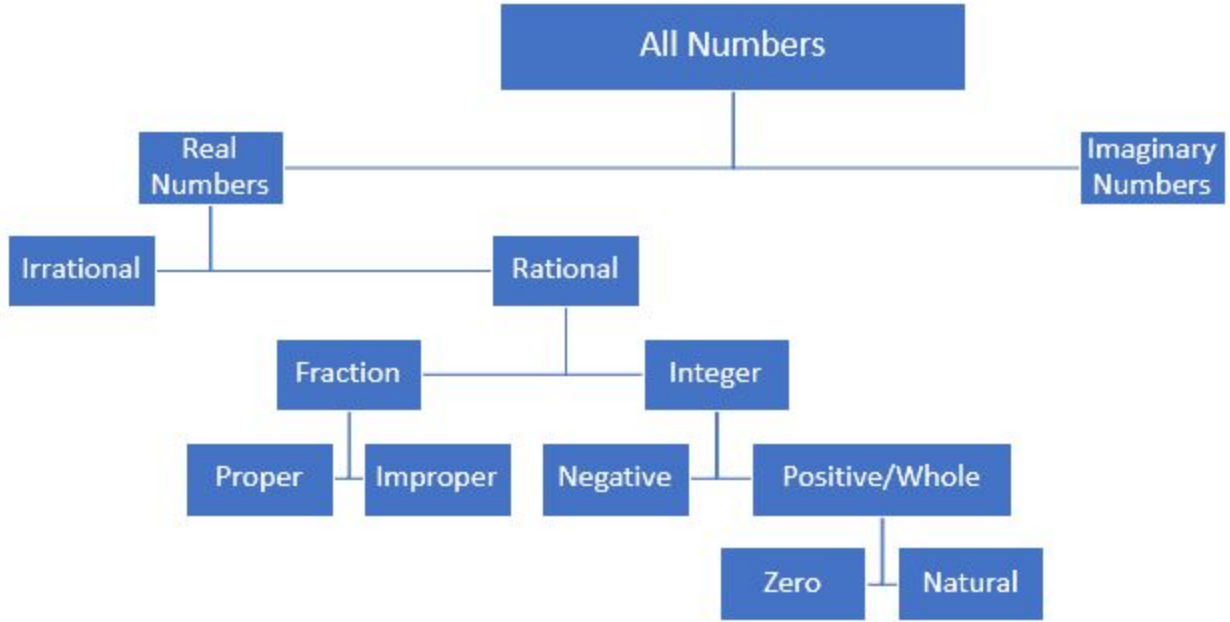

Computer Terminal Corporation
DATAPOINT 3300

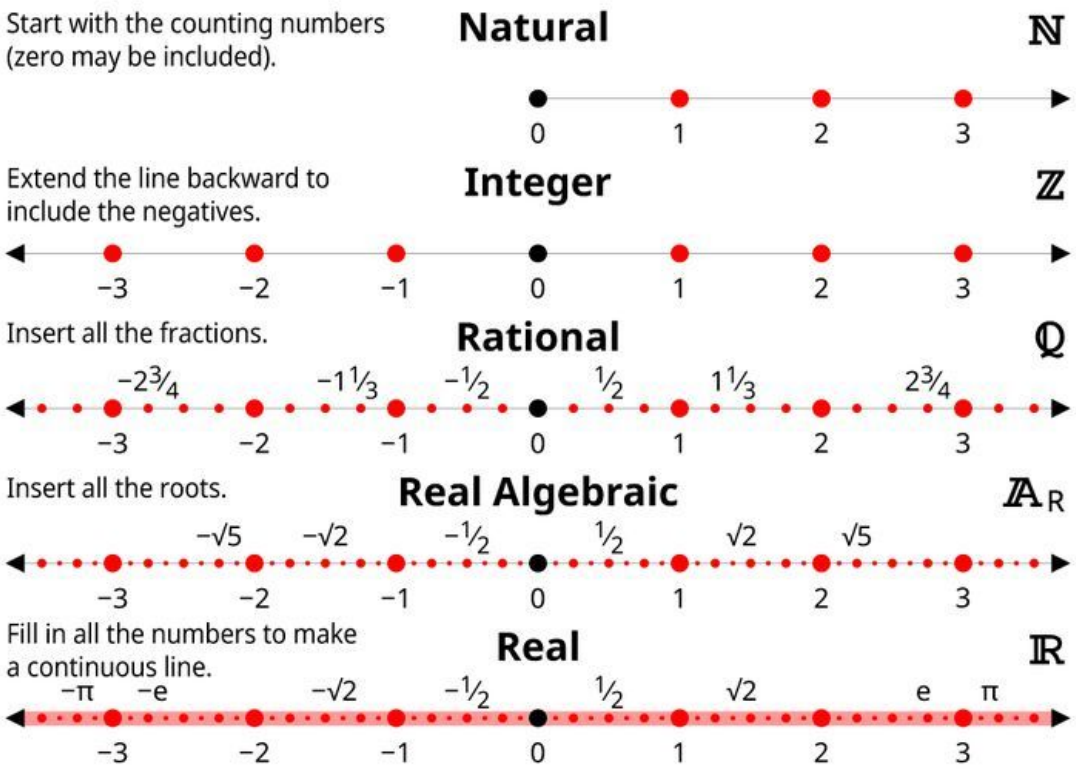

C D E F G A B C

Alphabet; Grammatical punctuation; Numbers;
Arithmetic signs; Logical signs;

$1 + x = 3$
solve for x

```
int x = 3;
x = x + 1;
```


All Numbers
Real Numbers
Imaginary Numbers
Irrational
Rational
Fraction
Integer
Proper
Improper
Negative
Positive/Whole
Zero
Natural


Start with the counting numbers (zero may be included).
Natural
ℕ
0 1 2 3
Extend the line backward to include the negatives.
Integer
ℤ
−3 −2 −1 0 1 2 3
Insert all the fractions.
Rational
ℚ
−2¾ −1⅓ −½ ½ 1⅓ 2¾
−3 −2 −1 0 1 2 3
Insert all the roots.
Real Algebraic
𝔸R
−√5 −√2 −½ ½ √2 √5
−3 −2 −1 0 1 2 3
Fill in all the numbers to make a continuous line.
Real
ℝ
−π −e −√2 −½ ½ √2 e π
−3 −2 −1 0 1 2 3

```
int x = 3;
float x = 3.14;
Double x = 3.14159265;
bool x = true;
string x = “cat”;
vector x = 0, -1, 0;
color x = 255, 0, 0;
```

110
001
010
000
111
100

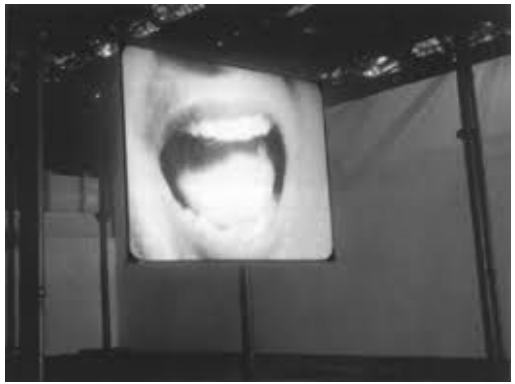
10011010

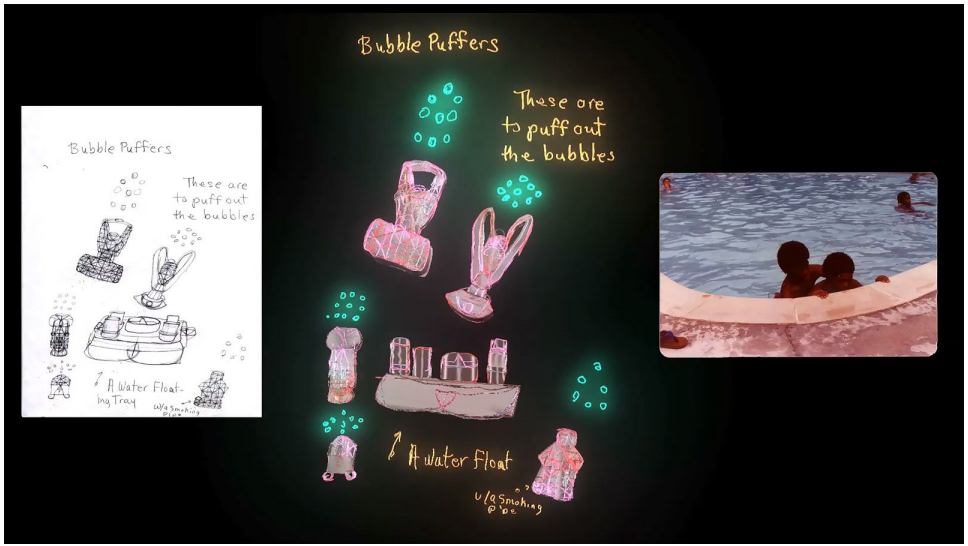
```
Color myColor = (255, 0, 255);
```

```
int x = 1;
```

```
int x = 3;
float y = 3.14;
boolean z = true;
String ab = "cat";

print(x, y, x + y, z, ab);


—---------------------------------
Console: 3 3.14 6.1400003 true cat
```

```
int x = 3;
float y = 3.14;
float q = y * x;

print(q);

_________________________________
Console: ????
```




Bubble Puffers
These are to puff out the bubbles
A Water Floating Tray
u/a Smoking Pipe
Bubble Puffers
These are to puff out the bubbles
A water float
u/a Smoking Pipe

Homework: create lists of variables for each data type, write a one sentence proof of what the pattern is that links each variable in its list (i.e. 5 integers that are all odd numbers; or 10 floating point numbers that are all irrational numbers. Upload your code to github.