```
1. a) num1, grade, number2, names,
  b) 2number (starts with digit), num 1 (space), sum (keyword), name! (symbol)
2. a) int numBeads; numBeads = 5;
  b) int numBeads = 5;
3. a) yourNumber = 13
  b) yourNumber = 11
4.
a) int
b) double
c) int
d) double
e) boolean
f) char
5.
a) Primitive keeps simple values and abstract is built off of primitives
b) Class is a blueprint and an object is an instance
11.
a) y = (int)(j*k);
b) z = j * k; no cast needed
```