**Complete questions #1 - #5, #11**

**1. A)**

**number**

**firstName**

**anything4**

**speed5time**

**B)**

**First name** (illegal; because it consists of a space)

**23anything** (illegal because it starts with a number)

**Int** ( illegal because it is a reserved command and function in Java)

**Speed-time** (illegal because it has a hyphen: only numbers, digits, underscores and dollar signs are permitted)

**2.**

**A)**

**int numBeads;**

**numBeads = 5;**

**B)**

**int numBeads = 5;**

**3.**

**A) 13**

**b) 11**

**4.**

**A) int**

**B) int**

**C) double**

**D) boolean**

**E) char**

**5.**

**A)**

**Primitive Data Type: can store simple values directly in memory. (Ex. Boolean, char, int, float, double, etc)**

**Abstract Data Type: they story memory addresses of objects. (Ex. String, Class, Interface, ect)**

**B)**

**A class is like the blueprint for creating objects, it defines what the object will be like. It can be categorized as an abstract data type.**

**11.**

**A) y = j \*(int)(k +0.5);**

**B) y = (double)j\*k;**

**C) z = k \* k; (no type casting needed since all are variables are double)**

**D) j = (int)(k +0.5);**

**E) k = (double)j ;**

**F) y = j + 3; (no type cast needed, all variables are int)**