

Pencil 2 Solutions.

1. `String socialSecurityStatus=age>65? "eligible" : "ineligible"`
2. **A. f**
B. 15
C. friendly
friendly face
3.

```
public class Circle{
    public static void main(String[] args){
        double r=6;
        double A=Math.PI*r*r;
    }
}

public class Rectangle{
    public static void main(String [] args){
        double length=8;
        double width=7;
        double diag=Math.sqrt(length*length+width*width);
    }
}
```
4. **a. $3 * 5 / 9 \% 2 =$**
 $3*5=15$
 $15/9=1$
 $1\%2=1$; Ans=1 of type int
b. $4 \wedge 3 \& 5$
 $3\&5=1$
 $4\wedge 1=5$ Ans=5
c. $13 \gg 2 \ll 2 \wedge 4$
 $13 \gg 2=3$
 $3 \ll 2=12$
 $12 \wedge 4=8$ Ans=8
d. $32 | 16/3 \gg 2 \& 5$
 $16/3=5$
 $5 \gg 2=1$
 $1\&5=1$
 $32 | 1=33$ Ans=33
5. **The statement** `int a = (b = 5);` wouldn't compile because we have to declare variable b first. If variable b was declared initially a would take the value of 5, but in this case b is not declared hence it will not compile.