

1. **#include** "iolib.h"

```
int main (void)
{
    float p1, p2, p3;
    float nota;
    writestring("Entre com as notas: ");
    p1 = readfloat();
    p2 = readfloat();
    p3 = readfloat();

    if (p3 >= 3) {
        if (p1 > p2) {
            nota = (p1 + p3) / 2;
        }
        else {
            nota = (p2 + p3) / 2;
        }
    }
    else {
        nota = (p1 + p2 + p3) / 3;
    }
    writestring("Nota: ");
    writefloat(nota);

    return 0;
}
```

2. **#include** "iolib.h"

#include <math.h>

```
int main (void)
{
    int n;
    float v;
    float vfinal;
    writestring("Entre com a quantia: ");
    v = readfloat();
    writestring("Entre com o numero de parcelas: ");
    n = readint();

    if (n == 0) {
        vfinal = 0.95 * v;
    }
    else {
        vfinal = v * pow(1.01,n);
    }
    writestring("Valor recebido: ");
    writefloat(vfinal);
}
```

```
    return 0;
}
```

3. (a) **#define** PI 3.1416

```
float volume (float R, float r)
{
    return 2*PI*PI*R*r*r;
}
```

(b) **int** main (**void**)

```
{
    float r1, r2;
    float v;
    writestring("Entre com os raios: ");
    r1 = readfloat();
    r2 = readfloat();

    v = volume(r1, r2);

    writestring("Volume do toro: ");
    writefloat(v);

    return 0;
}
```

4. **int** soma_pares (**int** n1, **int** n2)

```
{
    int i;
    int s = 0;
    for (i=n1; i<=n2; i++) {
        if (i%2 == 0) {
            s = s + i;
        }
    }
    return s;
}
```

5. (a) **int** fat (**int** n)

```
{
    int i;
    int f = 1;
    for (i=2; i<=n; i++) {
        f = f * i;
    }
    return f;
}
```

(b) **float** cosseno (**float** x, **int** n)

```
{
```

```
int i;  
float v = 0.0;  
for (i=0; i<n; i++) {  
    v = v + pow(-1,i) * pow(x,2*i) / fat(2*i);  
}  
return v;  
}
```