```
1. A
     2. D
     3. B
     4. A
     5. C
     6. D
     7. D
     8. D
     9. B
     10. C
     1. 1 0 5
     2. 72
     3. 60
     4. a*(b*(c*(d+exp(x))+y)+log(z))
     5. (x*x+y*y)>(a*a)&&(x*x+y*y)<(b*b)
     6.120
三、
     1. 39
     2. 5,6,5,6,10
     3. 1146
     4. 18
     5. 10,16
四、
1.
(1) #define N 100
(2) s=0
(3)a[i]
(4)continue
```

(7)(struct node \*)malloc(sizeof(struct node))

(5)count++

(6)return

2.

```
1 #include <stdio.h>
2 float fun(int n, float x){
3    if(n==0)
4    return 1;
5    return x * fun(n - 1, x);
6 }
7    int main(){
8     int n;
9    float x;
10    printf("请输入n,x:\n");
11    scanf("%d%f", &n, &x);
12    printf("pow(%d,%f)=%f\n", n, x, fun(n, x));
13    return 0;
14 }
```

2.

```
1 #include <stdio.h>
2 int a[53];
3 void fun(int n){
4   int t=n;
5   while (n<=52){
6   if (a[n]==0)
7   a[n]=1;
8   else
9   a[n]=0;
10   n+=t;
11  }
12 }</pre>
```

```
13 int main(){
14 int i,count=0;
15 for ( i= 1; i <= 52; ++i)
  a[i]=1;
16
17
   for (i = 2; i <= 52; ++i)
18
   fun(i);
19
20
   printf("正面朝上的牌序号数:\n");
21
  for (i = 1; i <= 52; ++i) {
22
23
  if(a[i]==1){
24 count++;
  printf("%d\t",i+1);
25
   }
26
27
  printf("\n正面朝上一共%d张牌\n", count);
28
   return 0;
29
30 }
```

3.

```
1 #include <stdio.h>
2 #include <math.h>
3 int verify(int n){
4 for (int i = 2; i <= (int)sqrt(n); ++i) {</pre>
5 if (n%i==0)
6 return 0;
7 }
8 return 1;
9 }
10 int main(){
int count=0, x=0;
12 FILE *file;
if((file=fopen("prime.txt","w"))==NULL){
14 printf("打开文件失败\n");
   return 0;
15
16
   for (int i = 2; i <=300; ++i) {
17
   if (verify(i)){
18
   fprintf(file, "%d\n", i);
19
   if(i+2<=300&&verify(i+2)){</pre>
20
    count++;
21
```

```
22 x=i;
23 }
24 }
25 }
26 fclose(file);
27 printf("[2,300]內一共%d对双胞胎数\n最大一对是%d,%d\n", count, x, x + 2);
28 return 0;
29 }
```