**Часть 1**

**№13**

using System;

namespace HelloWorld

{

class program

{

static void Main()

{

for (double x=-1.5;x<=1.5;x=x+0.1)

{

if (x==0)

{

Console.WriteLine($"{Math.Round(x, 1)} 0");

}

else

{

if (x<=(-1))

{

Console.WriteLine($"{Math.Round(x, 1)} 1");

}

else

{

if (x<=1)

{

Console.WriteLine($"{Math.Round(x, 1)} {-1\*(Math.Round(x, 1))}");

}

else

{

Console.WriteLine($"{Math.Round(x, 1)} -1");

}

}

}

}

}

}

}

**№14**

using System;

namespace HelloWorld

{

class program

{

static void Main()

{

double x1=1;

double x2=1;

double x3=1;

Console.WriteLine(x1);

Console.WriteLine(x2);

for (int x=1;x<=8;x++)

{

Console.WriteLine(x1+x2);

x3=x1+x2;

x1=x2;

x2=x3;

}

}

}

}

**№15**

**using System;**

**namespace HelloWorld**

**{**

**class program**

**{**

**static void Main()**

**{**

**double x1=1;**

**double x2=2;**

**double x3=1;**

**double y1=1;**

**double y2=1;**

**double y3=1;**

**for (int x=1;x<=5;x++)**

**{**

**if (x==5)**

**{**

**Console.WriteLine($"{x1}/{y1}");**

**}**

**x3=x1+x2;**

**x1=x2;**

**x2=x3;**

**y3=y1+y2;**

**y1=y2;**

**y2=y3;**

**}**

**}**

**}**

**}**

**Часть 2**

**№1-1.63498390018489**

**using System;**

**namespace Hello**

**{**

**class program**

**{**

**static void Main()**

**{**

**double x=0;**

**double i=1;**

**double s=0;**

**do**

**{**

**double a=Math.Cos(x\*i)/Math.Pow(i,2);**

**s=s+a;**

**i=i+1;**

**}**

**while (Math.Abs(Math.Cos(x\*i)/Math.Pow(i,2))>=0.0001);**

**Console.WriteLine(s);**

**}**

**}**

**}**

**№2-13**

**using System;**

**namespace Hello**

**{**

**class program**

**{**

**static void Main()**

**{**

**double p=1;**

**double i=4;**

**while (p\*i<=30000)**

**{**

**p=p\*i;**

**i=i+3;**

**}**

**Console.WriteLine(p);**

**Console.WriteLine(i-3);**

**}**

**}**

**}**

**№3-5**

**using System;**

**namespace Hello**

**{**

**class program**

**{**

**static void Main()**

**{**

**double p=100;**

**double k=1;**

**double a=5;**

**double h=5;**

**while ((((2\*a+(k-1)\*h)\*k)/2)<=p)**

**{**

**k=k+1;**

**}**

**Console.WriteLine(k-1);**

**}**

**}**

**}**

**№4-1.333251953125**

**using System;**

**namespace Hello**

**{**

**class program**

**{**

**static void Main()**

**{**

**double x=0.5;**

**double s=1;**

**double n=0;**

**while (Math.Pow(x,2\*(n+1))>=0.0001)**

**{**

**n=n+1;**

**s=s+Math.Pow(x,2\*n);**

**}**

**Console.WriteLine(s);**

**}**

**}**

**}**

**№5**

**using System;**

**namespace Hello**

**{**

**class program**

**{**

**static void Main()**

**{**

**double n=7;**

**double m=2;**

**double n1=n;**

**double chast=0;**

**while (n>m)**

**{**

**n=n-m;**

**chast=chast+1;**

**}**

**double ost=n;**

**Console.WriteLine($"{n1}/{m}={chast} ( ост. {ost})");**

**}**

**}**

**}**

**№7**

**А) 94.87171**

**Б) 8**

**В) 9**

**using System;**

**namespace HelloWorld**

**{**

**class program**

**{**

**static void Main()**

**{**

**double s=0;**

**double n=10;**

**for (double i=1;i<=7;i++)**

**{**

**s=s+n;**

**n=1.1\*n;**

**}**

**Console.WriteLine($"a) за 7 дней пробежит: {s} км");**

**double j=7;**

**while (s<=100)**

**{**

**j++;**

**s=s+n;**

**n=1.1\*n;**

**}**

**Console.WriteLine($"б) не раньше, чем за {j} дней пробежит 100 км");**

**n=10;**

**double k=1;**

**while (n<=20)**

**{**

**n=n\*1.1;**

**k++;**

**}**

**Console.WriteLine($"в) через {k} дней спортсмен будет пробегать в день больше 20 км");**

**}**

**}**

**}**

**№8 - через 10 дней**

**using System;**

**namespace HelloWorld**

**{**

**class program**

**{**

**static void Main()**

**{**

**double s=10000;**

**double p=1.08;**

**double k=0;**

**while (s<20000)**

**{**

**s=s\*p;**

**k++;**

**}**

**Console.WriteLine(k);**

**}**

**}**

**}**

**Часть 3\_№8 (17-9)**

**using System;**

**namespace HelloWorld**

**{**

**class program**

**{**

**static void Main()**

**{**

**double a=0.1;**

**double b=1;**

**double h=0.05;**

**for (double x=a;x<=b+h;x=x+h)**

**{**

**double i=0;**

**double s=0;**

**double sled=1;**

**while (Math.Abs(sled)>=0.0001)**

**{**

**s=s+sled;**

**i++;**

**double f=1;**

**for (double j=2;j<=i;j++)**

**{**

**f=f\*j;**

**}**

**sled=Math.Pow(2\*x,i)/f;**

**}**

**double y=Math.Pow(Math.E,2\*x);**

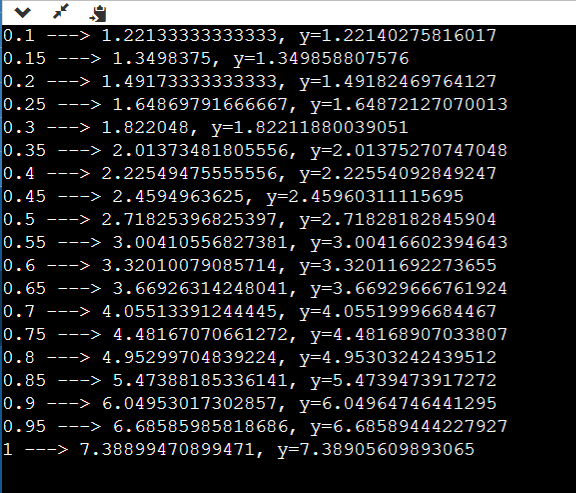
**Console.WriteLine($"{x} ---> {s}, y={y}");**

**}**

**}**

**}**

**}**

****