1. Площадь прямоугольника (двумерная)

double[][] xf = new double[][]

{

new double[] { 2, 4, 8 },

new double[] { 5, 11, 55 },

new double[] { 12.3, 5.2, 63.96 },

new double[] { 75.8, 0.56, 42.448 },

new double[] { 36, 98.2, 3535.2 },

new double[] { 1193.2, 256.3, 305817.16 },

new double[] { 85.3, 6, 511.8 },

new double[] { 12, 12, 144 },

new double[] { 2.5, 2.5, 6.25 }

};

2. Объем тетраэдра (одномерная)

> Объем тетраэдра равен дроби в числителе которой корень квадратный из двух помноженный на куб длины ребра тетраэдра, а в знаменателе двенадцать.

double[][] xf = new double[][]

{

new double[] { 5.3, 17.5427 },

new double[] { 121.7, 212392.853 },

new double[] { 56, 20693.4187 },

new double[] { 11, 156.8362 },

new double[] { 12, 203.616 },

new double[] { 103.2, 129511.1785 },

new double[] { 2, 0.94267 },

new double[] { 97, 107543.302 },

new double[] { 12.5, 230.1432 }

};

3. Объем пирамиды

> равен одной трети произведения площади основания на высоту:  где S – площадь основания, H – высота пирамиды https://mathematics.ru/courses/stereometry/content/javagifs/63229915596179-1.gif (двумерная)

double[][] xf = new double[][]

{

new double[] { 21.3, 12, 85.2 },

new double[] { 115.8, 14.5, 559.7 },

new double[] { 5, 2, 3.333 },

new double[] { 111.89, 7.52, 280.471 },

new double[] { 4.9, 86.2, 140.793 },

new double[] { 18.7, 82.23, 512.567 },

new double[] { 30, 29, 290 },

new double[] { 31, 16.16, 166.9867 },

new double[] { 55, 7.8, 143 }

};

4. Объем  усеченной пирамиды

> по формуле https://mathematics.ru/courses/stereometry/content/javagifs/63229915596359-4.gif где H – высота усеченной пирамиды, S1 и S2 – площади ее оснований. (трехмерная S1,S2,H)

double[][] xf = new double[][]

{

new double[] {33.454, 19, 39.68, 1027.2573 },

new double[] { 1.05, 14.48, 57, 369.155 },

new double[] { 117.19, 140.63, 2, 257.464 },

new double[] { 78, 56, 32, 2134.302 },

new double[] { 143, 85, 59, 6652.244 },

new double[] { 36.42, 97.35, 296.9, 19131.6414 },

new double[] { 57.8, 211.09, 14.54, 1838.574 },

new double[] { 148.25, 152.4, 355.01, 53365.184 },

new double[] {1.2, 7.86, 12, 48.525 }

};

5. Формула для эйлеровой характеристики

> V - E + F =2 -> V = E - F + 2 (двумерная)

double[][] xf = new double[][]

{

new double[] { 5, 6.2, 0.8 },

new double[] { 74.57, 15, 61.57 },

new double[] { 286.64, 47, 241.64 },

new double[] { 31, 604.25, -571.25 },

new double[] { 59, 12, 49 },

new double[] { 2, 2, 2 },

new double[] { 21, 18.5, 4.5 },

new double[] { 42.89, 29.5, 15.39 },

new double[] { 11, 45.3, -32.3 }

};

6.Теорема Пифагора

> (двумерная)

double[][] xf = new double[][]

{

new double[] { 23, 11.3, 78.137 },

new double[] { 20.89, 17, 87.793 },

new double[] { 69.5, 21, 319.18 },

new double[] { 313, 12.5, 1106.693 },

new double[] { 40.9, 25.78, 209.26 },

new double[] { 164.6, 25.4, 829.95 },

new double[] { 17.28, 51, 133.53 },

new double[] { 28.69, 527.6, 844.179 },

new double[] { 4, 3, 5 }

};

7. Дискриминант

> D=b^2 -4ac (трехмерная a,b,c)

double[][] xf = new double[][]

{

new double[] { -62, 30, 120.3, 30734.4 },

new double[] { 11, 0, 5, -220 },

new double[] {1.3, -85.6, 19.1, 7228.04 },

new double[] {-56.3, -17.8, 18, 4370.44 },

new double[] { 224, 15.5, 1, -655.75 },

new double[] { 0, 77.2, -53.69, 5959.84 },

new double[] { 9.4, 9.85, -9.47, 453.0945 },

new double[] { 236.7, 748.3, -8, 567527.29 },

new double[] {-11.02, 8, -36.2, -1531.696 }

};

8. Пройденное расстояние при ускорении

> (трехмерная a,v,t)

double[][] xf = new double[][]

{

new double[] { 5.5, 12, 23, 1730.75 },

new double[] {15.6, 13, 11.5, 1181.05 },

new double[] {-11.9, 0, 7.8, -361.998 },

new double[] {-789.6, 15.8, 189.5, -14174372.6 },

new double[] { 653.1, 78.4, 16.98, 95482.25862 },

new double[] { 0.23, 635, 758.4, 547728.6144 },

new double[] { 0, 0, 89.6, 0 },

new double[] { 56.7, 41.6, 13.69, 5882.750435 },

new double[] { 12, 2, 28.9, 5069.06 }

};

9. КПД

> n=Pполез/Pзатрач (двумерная)

double[][] xf = new double[][]

{

new double[] { 52, 35.8, 1.4525 },

new double[] { 25.89, 189.6, 0.1366 },

new double[] { 0, 5, 0 },

new double[] { 879.9, 1785, 0.4929 },

new double[] { 14.8, 28.9, 0.512 },

new double[] { 5, 4, 1.25 },

new double[] { 293.6, 293,6,1 },

new double[] { 45.3, 1, 45.3 },

new double[] { 12, 365, 0.033 }

};

10. Число частиц

>N0 = m/m0  (двумерная)

double[][] xf = new double[][]

{

new double[] { 91, 66.5, 1.3684 },

new double[] { 348.5, 785.4, 0.444 },

new double[] { 73.76, 78, 0.9456},

new double[] { 155, 21.7, 7.143 },

new double[] { 0.026, 1, 0.026 },

new double[] { 68.74, 346, 0.202 },

new double[] { 15, 77.9, 0.193 },

new double[] { 32, 32.41, 0.987},

new double[] { 47.055, 59, 0.7975 }

};