**Таблицы 10-11 классы**

**Таблица № 1 «Значения тригонометрических функций»**

Вычислите:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| № п/п | 1 вариант | 2 вариант | 3 вариант | 4 вариант |
| 1. | 0 | 0 | 0 | 0 |
| 2. |  | 0 | *cos* | sin |
| 3. | tg300 | ctg600 | tg450 | ctg300 |
| 4. | ctg450 | tg600 | ctg300 | tg450 |
| 5. | 0 | 0 | 0 | 0 |
| 6. | 0 | 0 | 0 | 0 |
| 7. | tg2100 | tg1200 | tg1350 | tg3000 |
| 8. | ctg2400 | ctg3000 | ctg4200 | ctg2100 |
| 9. |  |  |  |  |
| 10. |  |  |  |  |
| 11. | tg | tg | tg | tgπ |
| 12. | ctg | ctg | ctg | ctg |
| 13. |  |  |  |  |
| 14. |  |  |  |  |
| 15. | tg | tg | tg | tg |
| 16. | ctg | ctg | ctg | ctg |

**Таблица № 2 «Обратные тригонометрические функции»**

Вычислите:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| №п/п | 1 вариант | 2 вариант | 3 вариант | 4 вариант |
| 1. | arccos | arcsin(-1) | arccos | arcsin |
| 2. | arcsin1 | arccos(-1) | arcsin | arccos1 |
| 3. | arccos(-) | arcsin(- ) | arccos | arcsin0 |
| 4. | arcsin0 | arccos0 | arcsin(- ) | arcsin(- ) |
| 5. | arctg1 | arcctg | arctg | arcctg(- 1) |
| 6. | 2arctg | arctg0 | 2arctg(- ) | arctg1 |
| 7. | arccos() | arcsin() | arccos() | arcsin() |
| 8. | arctg) | arctg() | arctg() | arctg() |
| 9. | arcctg0 | arctg1 | arcctg | arcctg1 |
| 10. | arcsin | arccos | arcsin) | arccos(- 1) |
| 11. | arcctg(-1) | arcctg (-) | arcctg1 | arcctg(-) |
| 12. | arcsin(-1) | arcsin | arctg1 | arcctg |

**Таблица № 3 «Простейшие тригонометрические уравнения»**

Решите уравнения:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| №п/п | 1 вариант | 2 вариант | 3 вариант | 4 вариант |
| 1. | cosx = 1 | cosx = 0 | sinx = 0 | sinx = 1 |
| 2. | ctgx = 0 | tgx = 1 | ctgx = 1 | tgx = 0 |
| 3. | sinx = | cosx = | sinx = | cosx = |
| 4. | cosx = 1 | sinx = | cosx = 1 | sinx = |
| 5. | sinx =- | cosx = - | sinx =- | cosx = -1 |
| 6. | 2cosx = 1 | tgx = 0 | chg. = - 1 | tgx = 1 |
| 7. | -1 | cosx = - 1 | tgx = 1 | ctgx =- 1 |
| 8. | 2cosx = 1 | ctgx = 1 | sinx = 3 | cosx = 1 |
| 9. | sinx = | 2cosx = -3 | cosx = 0 | ctgx = 1 |
| 10. | cosx = 0,5 | sinx =- | tgx = | sinx =- |
| 11. | ctgx = | 3tgx = | ctgx = | sinx= 2 |

**Таблица № 4 «Метод интервалов»**

Решите неравенства:

|  |  |  |  |
| --- | --- | --- | --- |
| №п/п | 1 вариант | 2 вариант | 3 вариант |
| 1. | (х-2)(х+3)≥ 0 | 0 |  |
| 2. |  | (х+8)(х-2) | (х+3)(х-1) |
| 3. |  |  |  |
| 4. |  |  |  |
| 5. |  |  |  |
| 6. |  |  |  |
| 7. |  |  |  |
| 8. |  |  |  |
| 9. | (х-5)() | (х-3)() | () |
| 10. | (х-3)(х+6) |  |  |

**Таблица № 5 «Производная»**

Найдите производные функций:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| №п/п | 1 вариант | 2 вариант | 3 вариант | 4 вариант |
| 1. | Х3 | Х5 | Х4 | Х6 |
| 2. | 5х7 | -2х3 | 4х9 | -7х3 |
| 3. | 2х2 + 4х - 7 | 3х2 + 5х -11 | 6х2 - 7х + 9 | 5х2 + 3х -12 |
| 4. |  |  |  |  |
| 5. |  |  |  |  |
| 6. |  |  |  | cos5x |
| 7. |  |  |  |  |
| 8. |  |  |  |  |
| 9. |  |  |  |  |
| 10. |  |  |  |  |
| 11. |  |  |  |  |
| 12. |  |  |  |  |
| 13. |  |  |  |  |
| 14. |  |  |  |  |
| 15. |  |  | tgx | cosx |

**Таблица № 6 «Первообразная»**

Найдите одну из первообразных функции:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| № | 1 вариант | 2 вариант | 3 вариант | 4 вариант |
| 1. |  |  |  |  |
| 2. |  |  |  | - |
| 3. |  |  | - | - |
| 4. |  |  |  |  |
| 5. |  |  |  |  |
| 6. |  |  |  |  |
| 7. |  |  |  |  |
| 8. |  | 3 | 4 | 5 |
| 9. |  |  |  |  |
| 10. |  |  |  |  |
| 11. |  |  |  |  |
| 12. | + | - | - | + |

**Таблица № 7 «Степень с рациональным показателем»**

Вычислите:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| №п/п | 1 вариант | 2 вариант | 3 вариант | 4 вариант |
| 1. |  |  |  |  |
| 2. |  |  |  |  |
| 3. |  |  |  |  |
| 4. |  |  |  |  |
| 5. | \* | \* | \* | \* |
| 6. |  |  |  |  |
| 7. |  |  |  |  |
| 8. |  |  |  |  |
| 9. | ( )6 | ()6 | ()15 | ()8 |
| 10. |  |  |  |  |
| 11. |  |  |  |  |
| 12. | ()3 | ()6 | )6 | ( )12 |
| 13. |  |  |  |  |
| 14. | \* | \* | \* | \* |

**Таблица № 8 «Показательные и логарифмические уравнения»**

Решите уравнение :

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| № п/п | 1 вариант | 2 вариант | 3 вариант | 4 вариант |
| 1. | = 16 | = 27 | = 64 | = 25 |
| 2. | = 49 | = 125 | = 81 | =1000 |
| 3. | = | = | = | = |
| 4. | 3\*= 81 | 7\*= 343 | 5\* = 25 | 9\*= 729 |
| 5. | = 16 | = 81 | = 49 | = 64 |
| 6. | = 27 | = 128 | = 216 | = 1000 |
| 7. | = 7 | = 10 | = 9 | = 5 |
| 8. | = 5 | = 4 | = 3 | = 2 |
| 9. | = -3 | = -1 | = -2 | = -4 |
| 10. | 2 | )=3 | )=3 | )=3 |
| 11. | = 0 | = 0 | = 0 | = 0 |
| 12. | = 2 | ) = -1 | = 3 | ) = -1 |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| х | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 2х | 2 | 4 | 8 | 16 | 32 | 64 | 128 | 256 | 512 | 1024 |
| 3х | 3 | 9 | 27 | 81 | 243 | 729 | 2187 | 6561 | 19683 | 59049 |
| 4х | 4 | 16 | 64 | 256 | 1024 | 4096 | 16384 | 65536 | 262144 | 1048576 |
| 5х | 5 | 25 | 125 | 625 | 3125 | 15625 | 78125 |  |  |  |
| 6х | 6 | 36 | 216 | 1296 | 7776 |  |  |  |  |  |
| 7х | 7 | 49 | 343 | 2401 | 16807 |  |  |  |  |  |
| 8х | 8 | 64 | 512 | 4096 | 32768 |  |  |  |  |  |
| 9х | 9 | 81 | 729 | 6561 | 59049 |  |  |  |  |  |
| 10х | 10 | 100 | 1000 | 10000 | 100000 | 100000 |  |  |  |  |

**Таблица № 9 «Показательные и логарифмические неравенства»**

Решите неравенства :

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| № | 1 вариант | 2 вариант | 3 вариант | 4 вариант |
| 1. | 81 | 16 | 125 | 81 |
| 2. |  |  |  |  |
| 3. | 64 | 625 | 27 |  |
| 4. | 52х+1≤ 125 | 34х-3≥ 81 | 73х+2≤ 343 | 65х-1≥ 36 |
| 5. | 90,5х-7≥81 | 70,4х+3≤49 | 20,2х-5≤32 | 40,1х+3≥64 |
| 6. |  |  | 81 |  |
| 7. |  |  |  |  |
| 8. |  |  |  |  |
| 9. |  |  |  |  |
| 10. |  |  |  | 4 |
| 11. |  |  |  |  |
| 12. |  | 2 | 2 | 2 |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| х | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 2х | 2 | 4 | 8 | 16 | 32 | 64 | 128 | 256 | 512 | 1024 |
| 3х | 3 | 9 | 27 | 81 | 243 | 729 | 2187 | 6561 | 19683 | 59049 |
| 4х | 4 | 16 | 64 | 256 | 1024 | 4096 | 16384 | 65536 | 262144 | 1048576 |
| 5х | 5 | 25 | 125 | 625 | 3125 | 15625 | 78125 |  |  |  |
| 6х | 6 | 36 | 216 | 1296 | 7776 |  |  |  |  |  |
| 7х | 7 | 49 | 343 | 2401 | 16807 |  |  |  |  |  |
| 8х | 8 | 64 | 512 | 4096 | 32768 |  |  |  |  |  |
| 9х | 9 | 81 | 729 | 6561 | 59049 |  |  |  |  |  |
| 10х | 10 | 100 | 1000 | 10000 | 100000 | 1000000 |  |  |  |  |

**Таблица № 10 «Иррациональные уравнения и уравнения с модулем»**

Решите уравнение:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| № | 1 вариант | 2 вариант | 3 вариант | 4 вариант |
| 1. | = 4 | = 5 | = 2 | = 6 |
| 2. | 3+=5 | 4+=7 | 5+=7 | 2+=3 |
| 3. | 2+=1 | 6+=4 | 9+=6 | 5+=2 |
| 4. | 5-=2 | 7-=3 | 6-=5 | 4-=1 |
| 5. | = х | =х | =х | =х |
| 6. | = х -2 | | = х + 4 | |
| 7. | = х - 1 | | = х - 1 | |
| 8. | - х + 3 = 0 | | 3х – + 1 = 0 | |
| 9. |  | |  | |
| 10. |  | |  | |
| 11. | =3 | =7 | =2 | =5 |
| 12. | +5=3 | +7=4 | +4=1 | +8=6 |
| 13. | =х | =х | =х | =х |

**Таблица № 11 «Иррациональные неравенства и неравенства с модулем»**

Решите неравенства:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| № | 1 вариант | | 2 вариант | 3 вариант | 4 вариант |
| 1. | = 6 | | = 2 | = 5 | = 4 |
| 2. | ≤ 2 | | ≥ 6 | ≥ 4 | ≤ 5 |
| 3. | ≤ х | | ≥ х | ≥ х | ≤ х |
| 4. |  | | х - 1 | х - 1 |  |
| 5. |  | | |  | |
| 6. |  | | |  | |
| 7. |  | | |  | |
| 8. |  |  | |  |  |
| 9. | ≥ 2 | ≤ 3 | | ≥ 5 | ≤ 7 |
| 10. | ≤ х | ≥ х | | ≤ х | ≥ х |
| 11. |  | | |  | |
| 12. |  | | |  | |