**Ответы к самостоятельной работе по теме «Определение степени с целым отрицательным показателем»**

***Вариант 1***

1.Замените степень с целым отрицательным показателем дробью:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 8-2 | 7-2 | у-1 | х-30 | (cd)-3 | (m+n)-4 |
| $\frac{1}{8^{2}}$ = $\frac{1}{64}$ | $\frac{1}{7^{2}}$ = $\frac{1}{49}$ | $$\frac{1}{у}$$ | $$\frac{1}{x^{30}}$$ | $$\frac{1}{(cd)^{3}}$$ | $$\frac{1}{(m+n)^{4}}$$ |

2. Замените дробь степенью с целым отрицательным показателем:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| $$\frac{1}{2^{6}}$$ | $$\frac{1}{8}$$ | $$\frac{1}{s^{3}}$$ | $$\frac{1}{b}$$ | $$\frac{1}{16^{2}}$$ | $$\frac{1}{(k+m)^{5}}$$ |
| 2-6 | 8-1 = 2-3 | s-3 | b-1 | (42)-2 = 4-4 = 2-8 | (k + m)-5 |

3.Вычислите:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 2-3 | (-5)-1 | $$(\frac{1}{4})^{-2}$$ | (0,1)-4 | (1$\frac{1}{4}$)-2 | 2-2 + (-3)0 |
| $\frac{1}{2^{3}}$ = $\frac{1}{8}$ = = 0,125 | $\frac{1}{(-5)^{1}}$ = = - $\frac{1}{5}$ == - 0,2 | 42 = 16 | ($\frac{1}{10}$)-4 = = 104 = = 10000 | ($\frac{5}{4}$)-2 = = ($\frac{4}{5}$)2 = = $\frac{16}{25}$ = = 0,64 | $\frac{1}{2^{2}}$ + 1 = = $\frac{1}{4}$ + 1 = = 1$\frac{1}{4}$ = = 1,25 |

**Ответы к самостоятельной работе по теме «Определение степени с целым отрицательным показателем»**

***Вариант 2***

1.Замените степень с целым отрицательным показателем дробью:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 5-3 | 4-3 | n-1 | k-28 | (st)-8 | (b+c)-5 |
| $\frac{1}{5^{3}}$ = $\frac{1}{125}$ | $\frac{1}{4^{3}}$ = $\frac{1}{64}$ | $$\frac{1}{n}$$ | $$\frac{1}{k^{28}}$$ | $$\frac{1}{(st)^{8}}$$ | $$\frac{1}{(b+c)^{5}}$$ |

2. Замените дробь степенью с целым отрицательным показателем:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| $$\frac{1}{4^{5}}$$ | $$\frac{1}{12}$$ | $$\frac{1}{t^{6}}$$ | $$\frac{1}{c}$$ | $$\frac{1}{8^{4}}$$ | $$\frac{1}{(b-k)^{7}}$$ |
| 4-5 = 2-10 | 12-1 | t-6 | c-1 | (23)-4 = 2-12 | (b – k)-7 |

3.Вычислите:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 2-2 | (-4)-1 | $$(\frac{1}{3})^{-3}$$ | (0,1)-5 | (1$\frac{2}{3}$)-2 | 5-2 + (-14)0 |
| $\frac{1}{2^{2}}$ = $\frac{1}{4}$ = = 0,25 | $\frac{1}{(-4)^{1}}$ = = - $\frac{1}{4}$ == - 0,25 | 33 = 27 | ($\frac{1}{10}$)-5 = = 105 = = 100000 | ($\frac{5}{3}$)-2 = = ($\frac{3}{5}$)2 = = $\frac{9}{25}$ = = 0,36 | $\frac{1}{5^{2}}$ + 1 = = $\frac{1}{25}$ + 1 = = 1$\frac{1}{25}$ = = 1,04 |