

Ответ к заданию №2
от 13.12.2016г

$$1) (3 \cdot 10^{-3}) \cdot (2,1 \cdot 10^3) = (3 \cdot 2,1) \cdot (10^{-3} \cdot 10^3) = \\ = 6,3 \cdot 10^{-3+3} = 6,3 \cdot 10^0 = 6,3 \cdot 1 = 6,3$$

$$2) \frac{3^{-10} \cdot 3^5}{3^{-7}} = \frac{3^{-10+5}}{3^{-7}} = 3^{-5} : 3^{-7} = 3^{-5-(-7)} = \\ = 3^{-5+7} = 3^2 = 9$$

$$3) 6 \cdot 10 + 5 \cdot 10^2 + 4 \cdot 10^3 = 60 + 5 \cdot 100 + 4 \cdot 1000 = \\ = 60 + 500 + 4000 = 4560$$

$$4) \frac{3^5 \cdot 4^6}{12^5} = \frac{3^5 \cdot 4^6}{(3 \cdot 4)^5} = \frac{3^5 \cdot 4^6}{3^5 \cdot 4^5} = 4^6 : 4^5 = 4^{6-5} = 4^1 = 4$$

$$5) 2 \cdot (-1)^3 + 5 \cdot (-1)^4 = 2 \cdot (-1) + 5 \cdot 1 = -2 + 5 = 3$$

$$6) (5,7 \cdot 10^3) : (1,9 \cdot 10^{-2}) = (5,7 : 1,9) \cdot (10^3 : 10^{-2}) = \\ = (57 : 19) \cdot (10^{3-(-2)}) = 3 \cdot 10^{3+2} = 3 \cdot 10^5 = 3 \cdot 100000 = \\ = 300000$$

$$7) \frac{15^7}{3^5 \cdot 5^6} = \frac{(3 \cdot 5)^7}{3^5 \cdot 5^6} = \frac{3^7 \cdot 5^7}{3^5 \cdot 5^6} = 3^{7-5} \cdot 5^{7-6} = \\ = 3^2 \cdot 5 = 9 \cdot 5 = 45$$

$$8) (-10)^5 + (-10)^3 + (-10)^2 = -100000 + (-1000) + 100 = \\ = -100900$$