

Paper 5

August 2, 2024

1. Compute 203×102 .

2. Find prime factorization of 5423.

3. Find $\frac{1}{5^{-2}}$

4. Express 4^{16} as a power of 2.

5. What is the sum of first 99 positive integers?

6. How many trailing zeros are there in $2^{20} \cdot 5^{30}$?

7. Both ABC and $3D8$ are three digit numbers such that $ABC - 3D8 = 269$. If $3D8$ is divisible by 9, then what number does ABC represent?

8. What positive number squared equals 96×486 ?

9. Solve for x and y :

$$21x + 23y = 67$$

$$28x + 13y = 54$$

10. Solve for x :

$$14(x + 1) - 2(x - 1) = 20x$$