

# [Maths 1a imp qstns essay](https://assignbuster.com/maths-1a-imp-qstns-essay/)

WWW. PAPERSHUNT. COM MATHS – FIRST YEAR 1 A VERY IMPORTANT QUESTIONS BY WWW. PAPERSHUNT. COM AND HUNT FOR SUCCESS PUBLICATIONS. LONG ANSWER QUESTIONS Functions : 01. Let f : A ? B , g : B ? C be bijections. Then gof : A ? C is a bijection. 02. Let f : A ? B , g : B ? C be bijection. Then ( gof ) ? 1 ? f ? 1og ? 1 03. Let f : A ? B , I A and I B be identify functions on A and B respectively. Then foI A ? f ? I B of 04. Let f : A ? B be a bijection. Then fof 05. Let f : A ? B be a function. Then f is a bijection if and only if there exists a function g : B ? A such that fog ? I B and gof ?

I A and, in this case, g ? f ? 1 Mathematical Inductions : 06. Show that 49n ? 16n ? 1 is divisible by 64 for all positive integers n. n(n 2 ? 6n ? 11) 07. 2. 3 ? 3. 4 ? 4. 5 ? … upto n terms ? 3 08. 3. 52 n ? 1 ? 23 n ? 1 is divisible by 17 HUNT FOR SUCCESS ? 1 ? I B and f ? 1of ? I A 09. n 13 13 ? 23 13 ? 23 ? 33 ? 2n 2 ? 9n ? 13? ? ? ? …. upto n terms ? ? 24 ? 1 1? 3 1? 3 ? 5 2 2 2 2 2 2 n(n ? 1)2 (n ? 2) 10. 1 ? (1 ? 2 ) ? (1 ? 2 ? 3 ) ? ….. upto n terms ? 12 Multiplication of Vectos : 11. Let ? 1 and ? 2 be non-negative real numbers such that ? 1 ? ? 2 ? ? . Then (i) cos(? 1 ? 2 ) ? cos ? 1 cos ? 2 ? sin ? 1 sin ? 2 (ii) cos(? 1 ? ? 2 ) ? cos ? 1 cos ? 2 ? sin ? 1 sin ? 2 12. If in a parallelogram, diagonals are equal, then it is a rectangle. 13. If 0 ? A, B ? ? , then sin( A ? B ) = sinA cosB – cosA sinB 14. Find the shortest distance between the shew lines r ? (6i ? 2 j ? 2k ) ? t (i ? 2 j ? 2k ) : 1: mail us @ [email protected] com , cell: 798 3699 456 , Our books are available in selected book shops in andhra pradesh. for details visit. www. papershunt. com