

Q.1. Use deductive reasoning to prove that the sum of an even integer and odd integer is always an odd integer.

Q.2. Use deductive reasoning to prove that the sum of two odd integer is always an even integer.

Q.3. Use deductive reasoning (and distributive property) to prove $(a + b)^2 = a^2 + b^2 + 2ab$.

Q.4. Use deductive reasoning to prove to prove that the sum of any nine consecutive integers is 9 times the median.