CHAPTER 14. MATHEMATICAL REASONING

Focus Area Based Practice Questions

1. Consider the statement, P: If x=2, then x^2 =4.
   Write corresponding contrapositive statement of P.
2. a) Write the contrapositive of the given statement. "If a number is divisible by 9, then it is divisible by 3".
   b) Verify by the method of contradiction :
   " p : $\sqrt{7}$ *is irrational* ".
3. a) Write the contra positive of the statement: "If the integer n is odd, then n^2 is odd".
   b) Verify by the method of contradiction :
   " p : $\sqrt{5}$ *is irrational* ".
4. a) Which one of the following sentences is a statement.
   i) 275 is a perfect square.
   ii) Mathematics is difficult subject.
   iii) Answer this question.
   iv) Today is a rainy day

   b) Write the negation of the statement: "Every natural number is greater than zero".
5. a) Write the negation of the statement: "the sum of 3 and 4 is 7".
   b) Write the converse of the statement "if a number n is even, then n^2 is even.

MATHEMATICAL REASONING FOCUS AREA VIDEO LINK:

https://youtu.be/QpaWeYdck6Y