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Closed

[MTH401] The intersection of any finite number of open set in  $\mathbb{R}$  is

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Open

[MTH401] A set said to be open if and only if each of its points is a/an

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Interior point

[MTH401] If the inverse image of an open set is open, then the function is said to be

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Continuous

[MTH401] A subset of metric space  $(E, d)$  is a closed set if it contains

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All its limit points

[MTH401] When is a set  $A$  of real number said to be complete  
If every Cauchy sequence of points in  $A$  converges to a point in  $A$

[MTH401] The set of limit points of  $F$ , denoted by  $F'$ , is called \_\_\_\_\_  
Derive set of  $F$

[MTH401] Which of the following statement is false  
Any compact subset of a Hausdorff space is compact

[MTH401] A set  $A$  is a super set of  $B$  when \_\_\_\_\_  
 $B \subset A$

[MTH401] Consider the sequence  $(a_n : n \in \mathbb{N})$ , if and only if for every  $\epsilon > 0$ , there exist a positive integer  $(n_0)$  such that  $|a_n - a_m| < \epsilon$ , such sequence is said to be \_\_\_\_\_  
Cauchy sequence