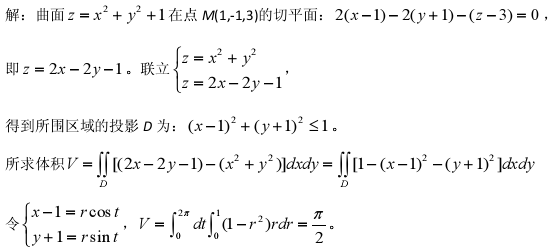
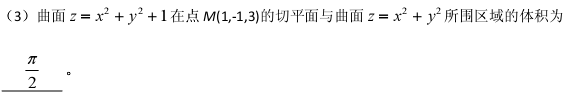
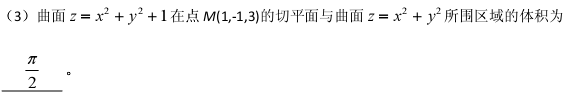
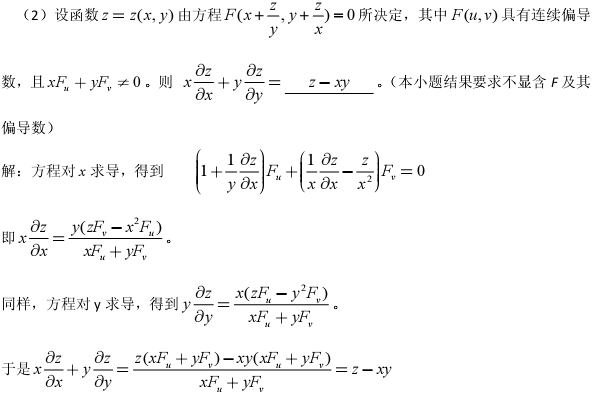
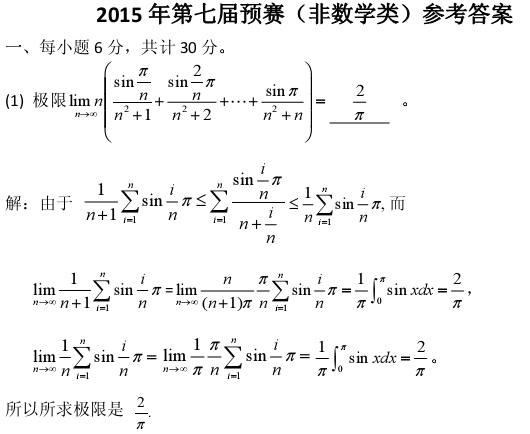
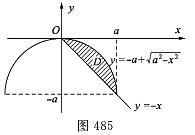
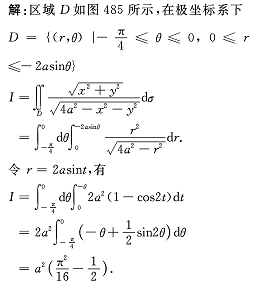
**2015年山东省第六届大学生数学竞赛(非数学类)参考答案**





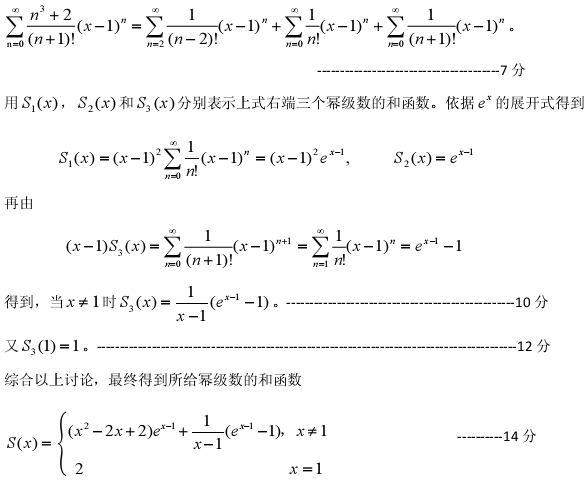
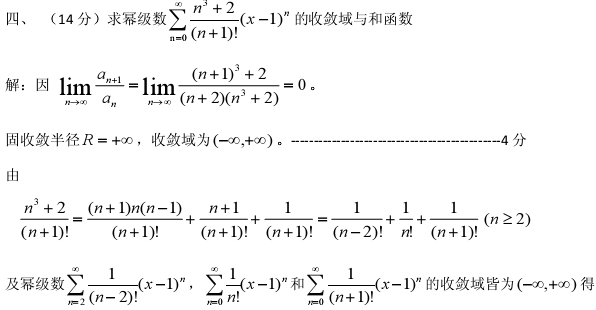
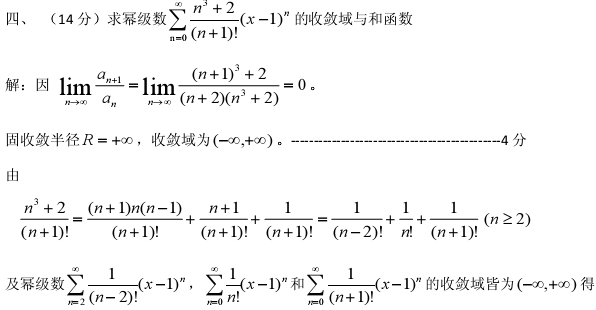
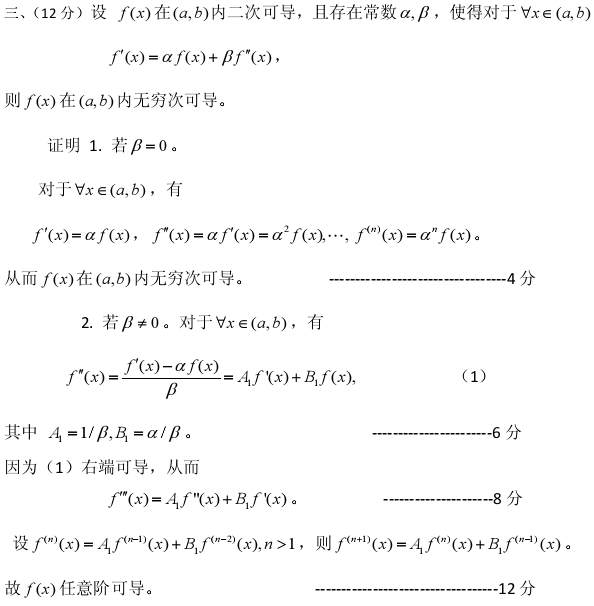
**答案：**



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五、(16分) 计算曲面积分，其中是球面的外侧.

解 由的对称性知



因此，



