

中国矿业大学 2005 年硕士生入学考试试题 (三小时)

科目代码: 412 科目名称: 经济学

1. 对图示 1-a, 1-b 所示体系进行内力构造分析 (5+5分)

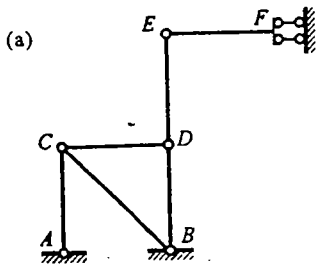
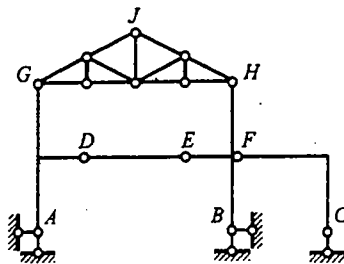

$$\boxed{V_i} \quad 1-a$$


图 1-6

2. 绘制图 2 所示多跨静定梁的弯矩图。(15分)

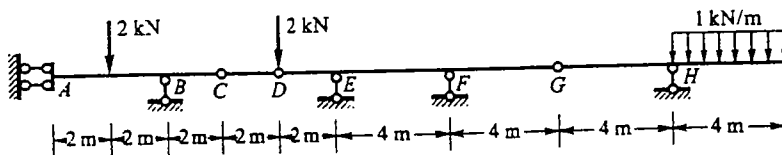


图 2

3. 绘制图3所示圆锥取点视图. (20分)

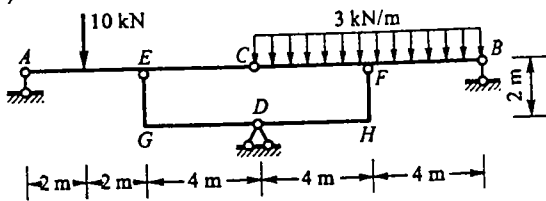
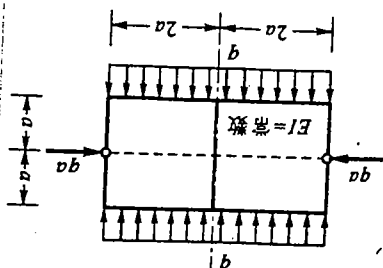
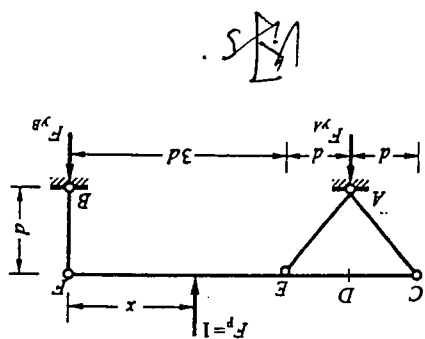


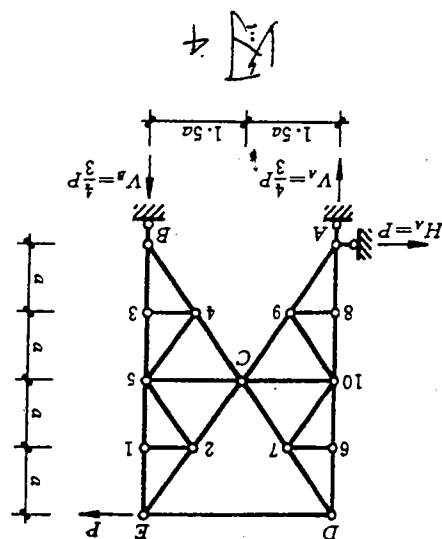
图 3



6. 分析图6所示刚架, 绘制弯矩图. 以结点EI为图 (20分)



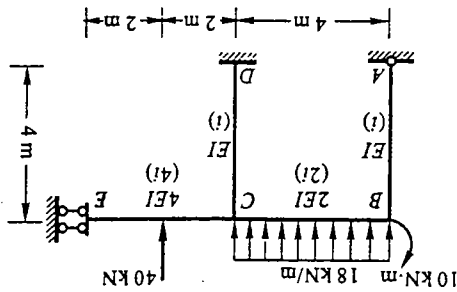
5. 求图5所示刚架AC段内力 F_{AC} 和 F_{AE}. F_{AE} 和 M_{AE} 的符号 (20分)



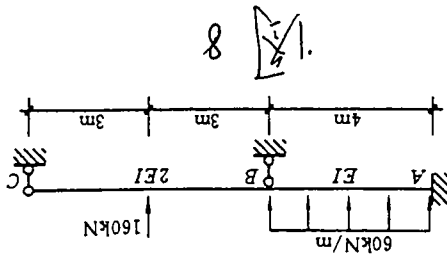
4. 求图4所示桁架的内力 (15分)

科目代码: 412 科目名称: 结构力学

7. 用位移法计算图示(图 7)刚架, 绘制最后弯矩图. (20分)



8. 用力法计算图 8 所示连续梁, 作弯矩图和剪力图, 并求 B 点反力. (15分)



9. 求图 9 所示静定梁的极限荷载 P_u , 取 AB 段的极限荷载为 40 kN/m . BE 段的极限荷载为 121 kN/m . (15分)

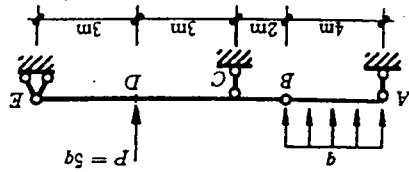


图 9

所有答题必须写在专用答题纸上，写在本试题纸上无效！

A large, empty rectangular box with a black border, intended for the student to write their answers to the questions on this page. The box occupies most of the page area below the header and above the footer.