

淡江大學 101 學年度轉學生招生考試試題

4) -1

系別：航空太空工程學系三年級 科目：工程力學(含靜力學、動力學)

考試日期：7月17日(星期二) 第1節

本試題共 4 大題， 2 頁

1. Determine the reactions for the three-hinged arch shown in Figure 1. (25%)

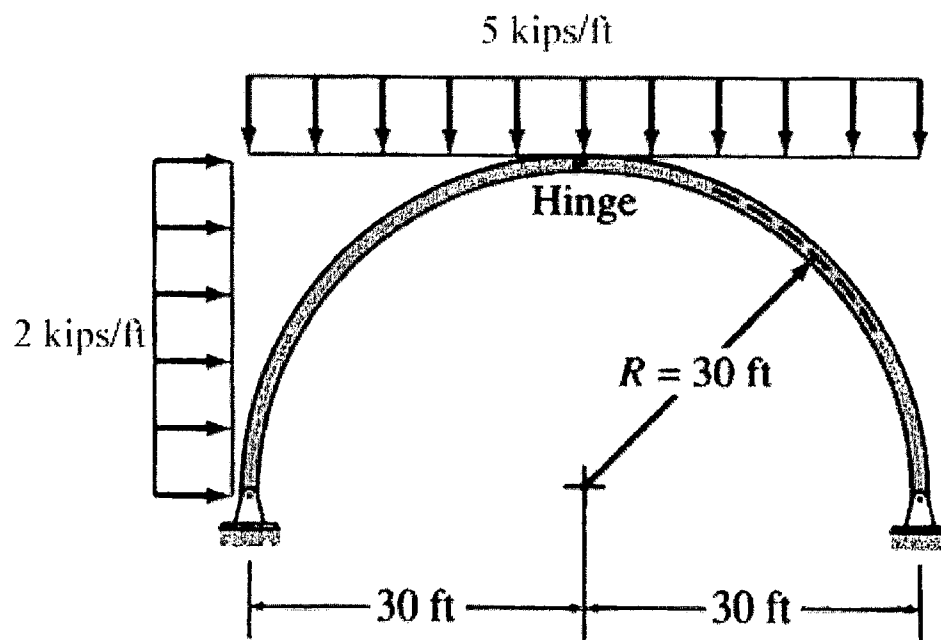


Figure 1

2. Please determine the internal forces in members ②, ⑥, ⑪, ⑩ and ⑬ shown in Figure 2. (25%)

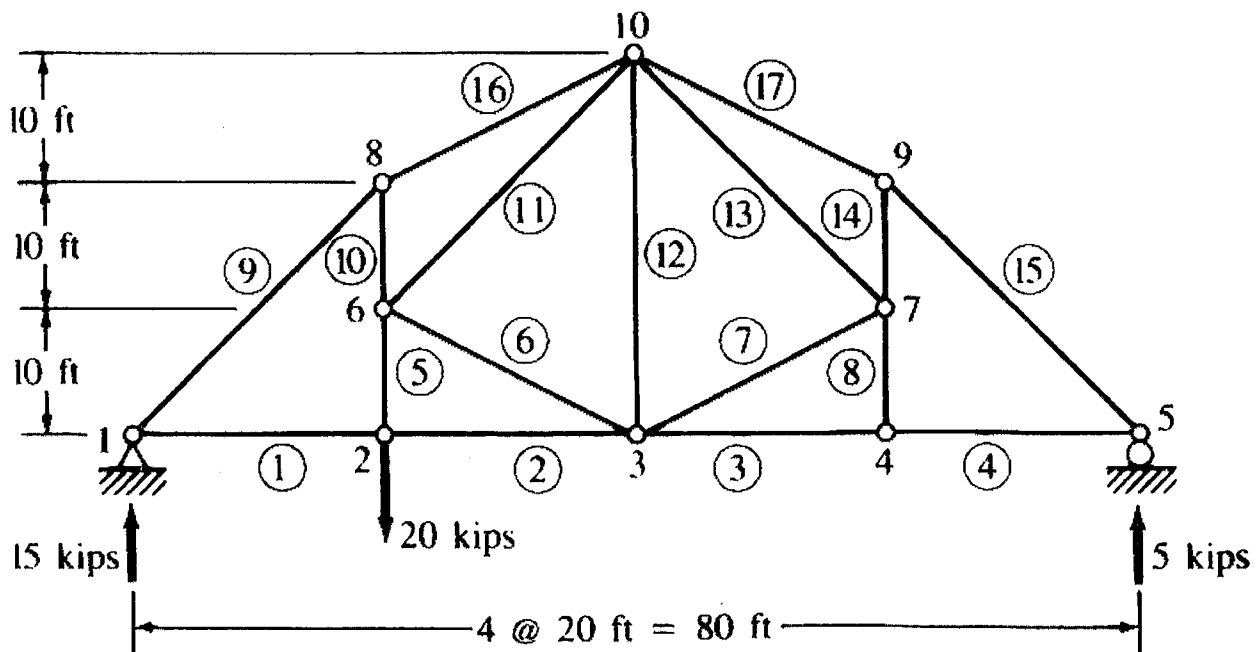


Figure 2

本試題雙面印刷

背面尚有試題

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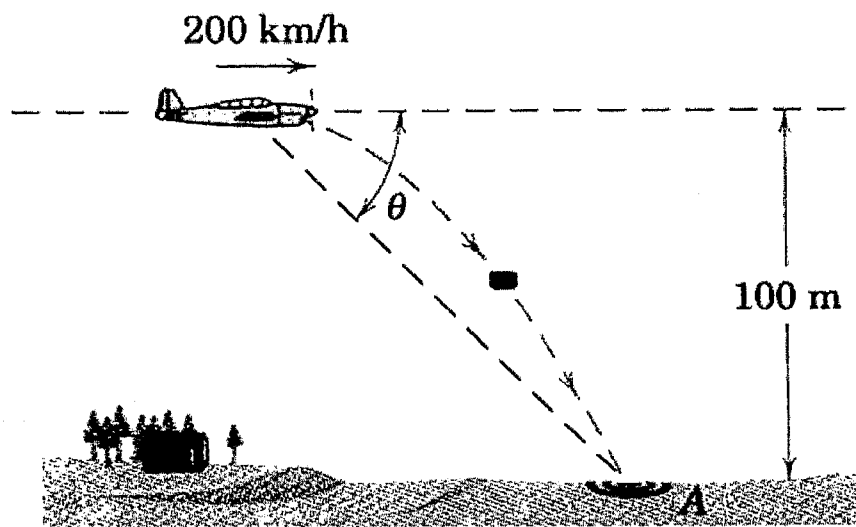
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3. The pilot of an airplane carrying a package of mail to a remote outpost wishes to release the package at the right moment to hit the recovery location A . What angle θ with the horizontal should be pilot's line of sight to the target make at the instant of release? The airplane is flying horizontally at an altitude of 100m with a velocity of 200 km/h. (25%)



4. The 4.8 kg slider is released from rest in position A and slides without friction along the vertical plane guide shown. Determine
- the speed v_B of the slider as it passes position B . (15%)
 - the maximum deflection δ of the spring. (10%)

