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| **ME102** | | **Engineering Mechanics: 17/1/2017** | | | **Quiz 1** | |
| 1. A container of weight W is suspended from ring A, to which cables AC and AE are attached. A force P is applied to the end F of a third cable that passes over a pulley at B and through ring A and that is attached to a support at D. 2. Knowing that W = 1000 N, determine the magnitude of P. **[2]** 3. Knowing that the tension in cable AC of the system described in (a) is 150 N, determine (i) the magnitude of the force P, (ii) the weight W of the container. **[4]** | | | Problem 1 | |
| 1. Four forces act on bolt A as shown. Determine the resultant of the forces on the bolt. **[4]** | | Problem 2 |

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