

IE-341

Section 1, CRN: 30512/513/514

Section 2, CRN: 30515/516/517

Section 3, CRN: 38299/300/301

Section 4, CRN: 65886/887/888

First Semester 1438-39 H (Fall-2017) – 3(2,1,2)

“HUMAN FACTORS ENGINEERING”

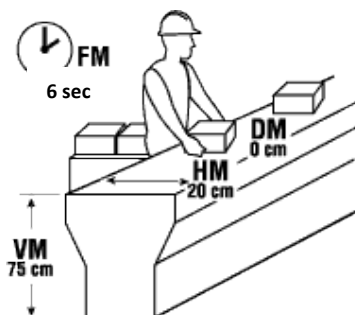
Monday, December 18, 2017 (30/03/1439H)

Tutorial 11: MMH (Case Study)

Name:	Student Number: 43	Section: Mon@8/ Mon@10 / Tu / Wed
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Answer ALL of the following questions

Analyze the following work task. A worker lifts 10 kg boxes from the conveyor to the cart, ten times every minute for two-hours.



You are required to do the following:

- Solve the problem using the “tables” approach, whereby you are requested to use the multiplier tables provided in the attached file.
 - Was there a need to redesign the problem, and why? If so, what was the critical factor?
 - What is the final RWL ? Is $L \leq RWL$?
 - What is the LI ? Is $LI \leq 1$?
 - When you are finished, you must show your final results in a **Lifting Analysis Worksheet** (also available in the attached file)
- Check your answers using “formulae” approach (which are provided in your slides). You must also make sure that you have produced the same/similar Lifting Analysis Worksheet.
- Recheck your answers using the online “NIOSH Lifting Equation Calculator,” which is available on the following website: <http://ergo-plus.com/niosh-lifting-equation-calculator/>. When you are done you should produce printable results from the website.