Question 3 Page 1 a) Assumption: "This year" refers to 2015 $C_n = C_K \left(\frac{ln}{lk} \right)$ $C_n = 87500 \left(\frac{175}{132} \right)$ = \$116 003.79 to produce one rock crushers this year Company wants 10 rock crushers, therefore the estimated Cost of materials = 10 × 116 003,79 = \$1 160 037.88 b) Zu = K(u logs/10g2) Where u is the uth unit of production K is the input resources needed for the first unit Z= 980 (5 log 0.89/log2) s is the learning curve parameter = 747.68 hours Zu is the input resources for theuth unit Estimated Labour Cost = Z5 X Loaded labour rate = 747.68 h x 120 \$/h =\$89721.09 The estimated labour cost of one crusher's \$89721.09 C) Estimated labour cost for all 10 crushers = 10 x \$89 721.09 = \$897 210.93 Estimated total cost = material cost + labour cost =\$1 160 037.88 + \$897 210.93 = \$2 057 248.81 Rounded to the rearest \$50 the estimated total cost 15 \$2057 250.00