**Warehouse Quiz: Packing and Loading Calculations**

1. You receive a packing order for 600 cases of item #401. The case dimensions for this item are 20” L x 15” W x 8” H. The maximum pallet height for the truck delivering this order is 7 feet.
   1. What is the total number of cases you can fit on one layer of a 48” x 40” pallet?
   2. How many cases high can you stack this order on a pallet?
   3. How many total cases will you stack on one pallet?
   4. How many pallets will you need for this order?
2. You receive a packing order for 500 cases of item #402. You pack 100 cases each on 5 pallets. Each case weighs 16.5 lbs. and each pallet weighs 45 lbs. The maximum loaded pallet weight for this order is 2000 lbs.
   1. What is the weight of one loaded pallet?
   2. Is the weight of the load safe?
   3. What is the total load weight for the entire order?
3. A 45-foot truck will hold a maximum of 22 standard pallets. It has a weight limit of 40,000 lbs. The interior load dimensions for this truck are 44’ L x 7’ W x 7.5’ H.
   1. What is the volume of this truck?
4. Your order has 20 full pallets and each pallet contains 60 cases. Each case weighs 31.5 lbs. and each empty pallet weighs 45 lbs. The dimensions for each loaded pallet are 48” L x 40” W x 85” H.
   1. What is the weight and volume of one loaded pallet?
   2. What is the weight and volume of the entire order?
5. You load the truck from #3 with the order from #4 above.
   1. What percent of the truck’s weight capacity would the order require?
   2. What percent of the truck’s volume capacity would the order require?